

CALL NO. 404

CONTRACT ID. 162266

JOHNSON COUNTY

FED/STATE PROJECT NUMBER 058GR16P094-FE01

DESCRIPTION US 460 & KY 40 (JOHNSON COUNTY)

WORK TYPE JPC PAVEMENT

PRIMARY COMPLETION DATE 6/30/2017

LETTING DATE: September 30,2016

Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME September 30,2016. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

NO PLANS ASSOCIATED WITH THIS PROJECT.

DEFERRED PAYMENT

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

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PART I SCOPE OF WORK

ADMINISTRATIVE DISTRICT - 12

CONTRACT ID - 162266

058GR16P094-FE01

COUNTY - JOHNSON

PCN - MP05800401602 FE01 058 0040 011-012

PAINTSVILLE TO MEALLY ROAD (KY 40) (MP 11.659) BEGIN 770 FEET EAST OF KY 1428 EXTENDING EAST TO THE BEGINNING OF LEVISA FORK OF BIG SANDY BRIDGE (MP 11.762), A DISTANCE OF 0.10 MILES.JPC PAVEMENT REPAIRS

GEOGRAPHIC COORDINATES LATITUDE 37:48:54.00 LONGITUDE 82:47:34.00

PCN - MP05804601601 FE01 058 0460 007-008

SALYERSVILLE TO PAINTSVILLE ROAD (US 460) (MP 7.723) BEGIN 1594 FEET EAST OF BROOKS CONLEY ROAD EXTENDING EAST 21 FEET WEST OF KY 40 (MP 7.805), A DISTANCE OF 0.08 MILES.JPC PAVEMENT REPAIRS GEOGRAPHIC COORDINATES LATITUDE 37:49:22.00 LONGITUDE 82:50:09.00

COMPLETION DATE(S):

COMPLETED BY 06/30/2017

APPLIES TO ENTIRE CONTRACT

CONTRACT NOTES

PROPOSAL ADDENDA

All addenda to this proposal must be applied when calculating bid and certified in the bid packet submitted to the Kentucky Department of Highways. Failure to use the correct and most recent addenda may result in the bid being rejected.

BID SUBMITTAL

Bidder must use the Department's Expedite Bidding Program available on the Internet web site of the Department of Highways, Division of Construction Procurement. (www.transportation.ky.gov/construction-procurement)

The Bidder must download the bid file located on the Bid Express website (www.bidx.com) to prepare a bid packet for submission to the Department. The bidder must submit electronically using Bid Express.

JOINT VENTURE BIDDING

Joint venture bidding is permissible. All companies in the joint venture must be prequalified in one of the work types in the Qualifications for Bidders for the project. The bidders must get a vendor ID for the joint venture from the Division of Construction Procurement and register the joint venture as a bidder on the project. Also, the joint venture must obtain a digital ID from Bid Express to submit a bid. A joint bid bond of 5% may be submitted for both companies or each company may submit a separate bond of 5%.

UNDERGROUND FACILITY DAMAGE PROTECTION

The contractor shall make every effort to protect underground facilities from damage as prescribed in the Underground Facility Damage Protection Act of 1994, Kentucky Revised Statute KRS 367.4901 to 367.4917. It is the contractor's responsibility to determine and take steps necessary to be in compliance with federal and state damage prevention directives. When prescribed in said directives, the contractor shall submit Excavation Locate Requests to the Kentucky Contact Center (KY811) via web ticket entry. The submission of this request does not relieve the contractor from the responsibility of contacting non-member facility owners, whom shall be contacted through their individual Protection Notification Center. Non-compliance with these directives can result in the enforcement of penalties.

SPECIAL NOTE FOR COMPOSITE OFFSET BLOCKS

Contrary to the Standard Drawings (2016 edition) the Cabinet will allow 6" composite offset blocks in lieu of wooden offset blocks, except as specified on proprietary end treatments and crash cushions. The composite blocks shall be selected from the Cabinet's List of Approved Materials.

REGISTRATION WITH THE SECRETARY OF STATE BY A FOREIGN ENTITY

Pursuant to KRS 176.085(1)(b), an agency, department, office, or political subdivision of the Commonwealth of Kentucky shall not award a state contract to a person that is a foreign entity required by KRS 14A.9-010 to obtain a certificate of authority to transact business in the Commonwealth ("certificate") from the Secretary of State under KRS 14A.9-030 unless the person produces the certificate within fourteen (14) days of the bid or proposal opening. If the foreign entity is not required to obtain a certificate as provided in KRS 14A.9-010, the foreign entity should identify the applicable exception. Foreign entity is defined within KRS 14A.1-070.

For all foreign entities required to obtain a certificate of authority to transact business in the Commonwealth, if a copy of the certificate is not received by the contracting agency within the time frame identified above, the foreign entity's solicitation response shall be deemed non-responsive or the awarded contract shall be cancelled.

Businesses can register with the Secretary of State at https://secure.kentucky.gov/sos/ftbr/welcome.aspx .

SPECIAL NOTE FOR PROJECT QUESTIONS DURING ADVERTISEMENT

Questions about projects during the advertisement should be submitted in writing to the Division of Construction Procurement. This may be done by fax (502) 564-7299 or email to kytc.projectquestions@ky.gov. The Department will attempt to answer all submitted questions. The Department reserves the right not to answer if the question is not pertinent or does not aid in clarifying the project intent.

The deadline for posting answers will be 3:00 pm Eastern Daylight Time, the day preceding the Letting. Questions may be submitted until this deadline with the understanding that the later a question is submitted, the less likely an answer will be able to be provided.

The questions and answers will be posted for each Letting under the heading "Questions & Answers" on the Construction Procurement website (www.transportation.ky.gov/contract). The answers provided shall be considered part of this Special Note and, in case of a discrepancy, will govern over all other bidding documents.

HARDWOOD REMOVAL RESTRICTIONS

The US Department of Agriculture has imposed a quarantine in Kentucky and several surrounding states, to prevent the spread of an invasive insect, the emerald ash borer. Hardwood cut in conjunction with the project may not be removed from the state. Chipping or burning on site is the preferred method of disposal.

INSTRUCTIONS FOR EXCESS MATERIAL SITES AND BORROW SITES

Identification of excess material sites and borrow sites shall be the responsibility of the Contractor. The Contractor shall be responsible for compliance with all applicable state and federal laws and may wish to consult with the US Fish and Wildlife Service to seek protection under Section 10 of the Endangered Species Act for these activities.

ACCESS TO RECORDS

The contractor, as defined in KRS 45A.030 (9) agrees that the contracting agency, the Finance and Administration Cabinet, the Auditor of Public Accounts, and the Legislative Research Commission, or their duly authorized representatives, shall have access to any books, documents, papers, records, or other evidence, which are directly pertinent to this contract for the purpose of financial audit or program review. Records and other prequalification information confidentially disclosed as part of the bid process shall not be deemed as directly pertinent to the contract and shall be exempt from disclosure as provided in KRS 61.878(1)(c). The contractor also recognizes that any books, documents, papers, records, or other evidence, received during a financial audit or program review shall be subject to the Kentucky Open Records Act, KRS 61.870 to 61.884.

In the event of a dispute between the contractor and the contracting agency, Attorney General, or the Auditor of Public Accounts over documents that are eligible for production and review, the Finance and Administration Cabinet shall review the dispute and issue a determination, in accordance with Secretary's Order 11-004.

06/01/16

SPECIAL NOTE FOR RECIPROCAL PREFERENCE

Reciprocal preference to be given by public agencies to resident bidders

By reference, KRS 45A.490 to 45A.494 are incorporated herein and in compliance regarding the bidders residency. Bidders who want to claim resident bidder status should complete the Affidavit for Claiming Resident Bidder Status along with their bid in the Expedite Bidding Program. Submittal of the Affidavit should be done along with the bid in Bid Express.

DEFERRED PAYMENT: The contractor shall have the distinct understanding that payment for any Work Performed Estimates may be delayed until December 31, 2016.

SURFACING AREAS

US 460

The Department estimates the mainline surfacing width to be 12.5 feet.

The Department estimates the total mainline area to be surfaced to be 606 square yards.

The Department estimates the shoulder width to be 0 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 0 square yards.

US 40

The Department estimates the mainline surfacing width to be varied 24 to 97 feet.

The Department estimates the total mainline area to be surfaced to be 2,496 square yards.

The Department estimates the shoulder width to be 0 feet on each side.

The Department estimates the total shoulder area to be surfaced to be 0 square yards.

DGA BASE

Unless otherwise noted, the Department estimates the rate of application for DGA Base to be 115 lbs/sy per inch of depth.

FUEL AND ASPHALT PAY ADJUSTMENT

The Department has included the Contract items Asphalt Adjustment and Fuel Adjustment for possible future payments at an established Contract unit price of \$1.00. The Department will calculate actual adjustment quantities after work is completed. If existing Contract amount is insufficient to pay all items on the contract with the adjustments, the Department will establish additional monies with a change order.

SPECIAL NOTE FOR JPC INTERSECTION PAVEMENT

I. DESCRIPTION

Except as specified herein, construct Jointed Plain Concrete (JPC) intersection pavement in accordance with the Department's Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Section references are to the Standard Specifications. Furnish all materials, equipment, labor, and incidentals for:

(1) Removing asphalt and/or concrete pavement and replacing with JPC Pavement; (2) Maintaining and controlling traffic; and (3) All other work specified as part of this contract.

II. MATERIALS

The Department will sample and test all materials according to the Department's sampling Manual. Make the materials available for sampling a sufficient time in advance of their use, to allow for the necessary time for testing, unless otherwise specified in these notes.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Dense Graded Aggregate.** Do not furnish Crushed Stone Base in lieu of DGA.
- **C. Jointed Plain Cement Concrete Pavement.** Use JPC Pavement 11 inch. At Contractor's request and at no additional cost to the Department, the Engineer may approve other high early strength rapid setting concrete. The Department will allow either central mixing or truck mixing.
- **D. Joint Sealant.** Use hot poured elastic, no alternates.
- **E. Traffic Signal Loops.** See Special Notes for Traffic Signal Preformed Loop Replacement.

III. CONSTRUCTION METHODS

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Be responsible for all site preparation, including but not limited to, incidental excavation and backfilling; removal of all obstructions or any other items; disposal of materials; sweeping and removal of debris; shoulder preparation and restoration; temporary and permanent erosion and pollution control; final dressing, clean

JPC Intersection Page 2 of 5

up, and seeding; and all incidentals. Perform all Site Preparation only as approved or directed by the Engineer.

- **C. Pavement Removal.** Consider pavement removal locations and dimensions shown on the drawings to be approximate only; the Engineer will determine exact locations and dimensions at the time of construction. Prior to removal, saw-cut existing asphalt and/or concrete pavement at locations directed by the Engineer to provide a neat edge where new concrete will adjoin existing pavement. Remove existing asphalt and/or concrete pavement, underlying stone base if necessary to provide for the specified thickness of the replacement JPC Pavement.
- **D.** Concrete Pavement Replacement. Prior to pavement removal and placing JPC Pavement, obtain the Engineer's approval of proposed method of construction for ensuring and establishing a smooth profile. Immediately after removing asphalt pavement, stabilize the base as directed by the Engineer with crushed stone base and place the replacement JPC in a continuous operation in accordance with the Traffic Control Plan Phasing and as directed by the Engineer. Construct the replacement JPC Pavement with a minimum depth of 11 inches; however, transition the finished grade to match adjacent pavement that is to remain in place; therefore, the actual thickness of the pavement may be greater than 11 inches in some areas. Consolidate the concrete, strike off, machine finish with a vibrating or roller screed, and straightedge the plastic concrete with a straightedge conforming to Section 501.02.18. Test the profile of the finished pavement with a 12 foot straight edge according to Section 501.03.19. Provide positive drainage upon completion of construction.
- **E. Joint Sealing.** Saw, clean, and seal transverse and longitudinal joints as shown on the standard drawings and as directed the Engineer.
- **F. Traffic Signal Loops.** See Special Notes for Traffic Signal Preformed Loop Replacement. Protect lead wires from each loop to the junction box during each phase of the construction sequence at no additional cost to the Department.
- **G. Disposal of Waste.** Dispose of all cuttings, debris, and other waste off the right-of-way at sites obtained by the Contractor at no additional cost to the Department. See Special Note for Waste and Borrow.
- H. Pavement Markings. See traffic Control Plan.

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- **I. On-Site Inspection.** Prior to submitting a bid, make a thorough inspection of the site and become thoroughly familiar with the existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made. The Department will not honor any claims resulting from site conditions.
- **J. Property Damage and Restoration.** Be responsible for all damage to public and/or private property resulting from the work. Repair or replace all damaged roadway features in like kind materials and design at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner.
- **K. Caution.** Consider information shown on the drawings and in this proposal and the types and quantities of work listed are approximate only, and not as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw his own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.
- **L. Utility Clearance.** Determine the location of all underground and overhead utilities prior to construction. It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that work does require relocation and/or adjustment, the utility companies will work concurrently with the Contractor while relocating their facilities.
- **M. Final Dressing, Clean Up, and Seeding and Protection.** After all work is completed, remove all waste and debris from the construction sites. Remove all temporary shoulder widening and restore disturbed shoulders. Perform Class A final dressing on all disturbed areas. Sow disturbed earthen areas with Seed Mixture No. 1.
- **N. Coordination of Work.** Be advised that other projects may be in progress within or in the near vicinity of this project. Take into consideration that the traffic control of those projects may affect this project and the traffic control of this project may affect those projects. Coordinate the work on this project with the work of the other contractors. In case of a conflict, the Engineer will determine the relative priority to give to work phasing on the various projects.

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IV. METHOD OF MEASUREMENT

The Department will measure only the bid items listed. All other items required to complete the construction shall be incidental to the listed bid items.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Site Preparation.** Other than the bid items listed, site preparation will not be measured for payment, but will be incidental to the other items of the work.
- **C. Remove Pavement.** The Department will measure removed asphalt pavement in square yards.
- **D. JPC Pavement-11 IN.** See Section 502.04.01 and Section 501.04.01.
- **E. Joint Sealing.** The Department will not measure Joint Sealing for payment, but shall be incidental to the bid item JPC Payement-11 IN.
- **F. Signal Loops.** See Special Notes for Traffic Signal Preformed Loop Replacement.
- **G. Smooth Dowels, Deformed Tie Bars, and Hook Bolts.** The Department will not measure smooth dowels, deformed tie bars and hook bolts, but will be incidental to JPC Pavement-11 IN.

IV. BASIS OF PAYMENT

The Department will make payment only for the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Remove Pavement.** Payment at the contract unit price per square yard shall be full compensation for saw cutting, milling and texturing, and removing existing pavement (asphalt and/or concrete); disposing of waste and debris.
- C. JPC Pavement-11 IN. See Section 502.05.
- **D. Signal Loops.** See Special Notes for Traffic Signal Preformed Loop Replacement.

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SPECIAL NOTE FOR STAKING

In addition to the requirements of Section 201, perform the following:

- 1. Contrary to Section 201.03.01, perform items 1-3 usually performed by the Engineer; and
- 2. Field survey the existing pavement in order to establish the existing cross slopes, transitions and profile. Irregularities in the existing pavement are to be eliminated with the construction of a smooth line and grade of the new JPC pavement to ensure the best rideability possible.
- 3. Verify intersection and lane profile and alignment and prepare a Drainage Development Worksheet to provide for positive drainage upon completion of construction; and
- 4. Prior to incorporating into the work, obtain the Engineers approval of all designs and revisions to be provided by the Contractor; and
- 5. Produce and furnish to the Engineer "As Built" plans; and
- 6. Perform any and all other staking operations required to control and construct the work
- 7. No direct payment will be made for staking. Staking will be incidental to other items of work.

Special Note for Fixed Completion Date and Liquidated Damages

Contrary to Section 108.09, Liquidated Damages of \$5,000 per calendar day will be assessed for each day work remains uncompleted on the KY 40 portion of the project beyond Dec. 31st, 2016.

Contrary to Section 108.09, Liquidated Damages of \$5,000 per calendar day will be assessed for each day work remains uncompleted on the entirety of this project beyond June 30th 2017.

In addition to the Liquidated Damages specified in Section 108.09, Liquidated Damages of \$10,000 per calendar day will be charged when a lane closure remains in place during the prohibited period outlined in the Traffic Control Plan. The \$10,000 per calendar day Liquidated Damages shall also apply if a lane closure remains in place outside of the 22 day continuous lane closure period permitted for bridge deck overlay construction, as outlined in the Traffic Control Plan.

If work is delayed by inclement weather, the minimum work required to allow removal of the lane closure, as directed by the Engineer, shall be resumed immediately as soon as weather permits or the Department will begin to assess Liquidated Damages as specified herein.

Contrary to Section 108.09 of the Standard Specifications, the disincentive fee will be charged during those periods when seasonal limitations of the Contract prohibit the Contractor from working on a controlling item or operation. This includes the months from December through March.

All liquidated damages will be applied

cumulatively. All other applicable

portions of Section 108 apply.

SPECIAL NOTES FOR REMOVAL OF GUARDRAIL IN ORDER TO ACCESS CONSTRUCTION SITE

If necessary to provide access to work sites and with prior approval of the Engineer, remove the existing guardrail system rail elements, posts, and offset blocks. Remove the minimum amount of the guardrail system required to provide access to the work site. Do not disturb guardrail end treatments, terminal sections, and/or bridge end connectors. Perform all guardrail removal operations under a full shoulder closure. Remove the guardrail immediately before access is needed and replace it immediately when access is no longer needed. Do not leave guardrail down overnight or at other times when operations are not actually in progress.

When removing and replacing guardrail, do not leave blunt ends exposed where they would be hazardous to the public. If left in place during operations, protect exposed ends with a temporary end treatment installed by connecting at least 25 feet of rail to the exposed end, and by slightly flaring, and burying the end of the rail completely into the existing shoulder. Place a drum with bridge panel in advance of the guardrail end and maintain during operations.

Reset the guardrail to the lines and grades existing immediately prior to removal as shown on current standard drawings or as designated by the Engineer. The Engineer will check the existing guardrail to be removed and reset before removal begins. If components are found missing or damaged to the extent that they cannot be reused, the Department will furnish the necessary parts and materials to the Contractor for installation when the guardrail is reset. The Department will make these parts available to the Contractor at the Department's Johnson County Maintenance facility. Be responsible for all damage to the existing guardrail system resulting from the work. Replace any parts that are damaged or lost during the guardrail removal and replacement process. Correct any vertical or horizontal misalignment not present prior to removal by any method approved by the Engineer, which allows the construction of the guardrail to the true grade and prevents apparent sags.

The Department will not measure removing and resetting the existing guardrail, replacing guardrail components that were damaged or missing prior to project with components furnished by the Department, furnishing and installing parts lost or damaged by the Contractor, and providing and maintaining a temporary end treatment with drum and panel, but shall be incidental to other items of work, as applicable.

1-3425 Remove Guardrail Access 01/02/2012

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SPECIAL NOTE FOR TYPICAL SECTION DIMENSIONS

Consider the dimensions shown on the typical sections for pavement and shoulder widths and thickness' to be nominal or typical dimensions. The Engineer may direct or approve varying the actual dimensions to be constructed to fit existing conditions. Do not widen existing pavement or shoulders unless specified elsewhere in this proposal or directed by the engineer.

1-3725 Typical Section Dimensions 01/02/2012

SPECIAL NOTE FOR SIDEWALK RAMPS & DETECTABLE WARNINGS

GENERAL

Unless otherwise stated in the contract, or as directed by or with prior approval from the Engineer, construct Sidewalk Ramps and Detectable Warnings in accordance with Sections 505 and 720; Supplemental Specifications; Standard Drawings RGX-040-03, RPM-150-08, RPM-152-08, RPM-170-09, and RPM-172-07; current editions, as applicable. In lieu of the Detectable Warnings shown on Standard Drawing RGX-040-03, the Department will also allow the use of any Detectable Kentucky Product Evaluation Warnings listed Phase XI on the (http://www.ktc.uky.edu/kytc/kypel/allevaluations.php). For Detectable Warnings as shown on Standard Drawing RGX-040-03, saw cut existing sidewalks, curb and gutter, and pavement, if present, as shown on the detail and reconstruct sidewalk ramps with detectable warnings as directed or approved by the Engineer. For Detectable Warnings from the Kentucky Product Evaluation List, install according to the manufacturer's recommendations. Unless specified otherwise in the Contract, construct sidewalk with 4" nominal minimum required thickness; however, if the existing sidewalk thickness is found to be greater or less than the thickness specified, transition the thickness as directed by the Engineer.

Except as required by the work, do not disturb drainage pipe, catch basins, and other roadway features, appurtenances and installations. Restore any roadway features, appurtenances, and installations damaged by the work in like kind materials and design at no additional cost to the Department. Dispose of all waste off the right of way at sites obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow).

MEASUREMENT & PAYMENT

SIDEWALK RAMPS – The Department will measure Sidewalk Ramps in accordance with Section 505.04.01 and Standard Drawing RPM-170-09, current editions; however, contrary to Sections 505.04.05 and 505.04.06, the Department will not measure Roadway Excavation or Embankment in Place, but shall be incidental to the Sidewalk. Accept payment at the Contract unit price per square yard as full compensation for all labor, materials, equipment, and incidentals required for removal and disposal of existing sidewalk and curb and gutter, excavation and embankment, construction of the sidewalk ramps, reconstruction of the adjacent curb and/or sidewalk as necessary to install the sidewalk ramps, and restoration of disturbed features in accordance with these notes or as directed by the Engineer.

DETECTABLE WARNINGS – The Department will measure Detectable Warnings in accordance with Section 505.04.04 and Standard Drawings RGX-040-03 and RPM-170-09, current editions. The Department will make payment according to Section 505.05.

HANDRAIL – The Department will measure and make payment for Handrail in accordance with Section 720.05 and Standard Drawing RPM-172-07, current editions.

1-3791 Sidewalk Ramps Pay SY 06/10/2016

TRAFFIC CONTROL PLAN FOR KY 40

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

The project will require three phases for construction so as to allow traffic to flow through the work site. It will be the contractor's option as to which one he wants to work first. This will require road close signs to be used for KY 2561 (Highlands Avenue) due to the control of the traffic within the work project.

Close the east bound lane of KY 40 within the project limits for removal and constructing the concrete roadway with curb and gutter. This will required portable signals placed on KY 581 and KY 40. Provide a minimum clear lane width of 10 feet.

Close the west bound lane of KY 40 from the end of the project to the junction of KY 581 so as to remove and construct the concrete roadway with curb and gutter. This will allow half of KY 581 to be constructed. Portable signals will be required here also and provide a minimum clear lane width of 10 feet.

Close the west bound lane of KY 40 from the junction of KY 581 to the beginning of the project so as to remove and construct the concrete roadway with curb and gutter. This will allow for the rest of KY 581 to be constructed. Portable signals will be required here also and provide a minimum clear lane width of 10 feet.

LANE CLOSURES

Do leave lane closures in place during non-working hours due to the phasing.

SIGNS

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Sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

CHANGEABLE MESSAGE SIGNS

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain Changeable Message Signs.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used for road closures and to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course.

Install Temporary Striping according to Section 112 with the following exception:

If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

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PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

1-3823 Traffic Control Plan 2 Lane Road Closed 01/02/2012

US 460 TRAFFIC CONTROL PLAN

TRAFFIC CONTROL GENERAL

Except as provided herein, maintain and control traffic in accordance with the Standard and Supplemental Specifications and the Standard and Sepia Drawings, current editions. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, furnish new, or used in like new condition, traffic control devices at the beginning of the work and maintain in like new condition until completion of the work.

PROJECT PHASING & CONSTRUCTION PROCEDURES

The Engineer may specify days and hours when lane closures will not be allowed.

At locations with three or more lanes, maintain one lane of traffic in each direction at all times during construction. At locations with two lanes, maintain alternating one way traffic during construction. Provide a minimum clear lane width of 10 feet; however, provide for passage of vehicles of up to 16 feet in width. If traffic should be stopped due to construction operations, and a school bus on an official run arrives on the scene, make provisions for the passage of the bus as quickly as possible.

LANE CLOSURES

Leave lane closures in place during non-working hours.

SIGNS

Sign posts and splices shall be compliant with NCHRP 350 or MASH. Manufacturer's documentation validating this compliance shall be provided to the Engineer prior to installation. Signs, including any splices, shall be installed according to manufacturer's specifications and installation recommendations. Contrary to section 112.04.02, only long-term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment. Short-term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

Traffic Control Plan Page 2 of 3

CHANGEABLE MESSAGE SIGNS

If deemed necessary by the Engineer, the Department will furnish, operate, and maintain Changeable Message Signs.

ARROW PANELS

Use arrow panels as shown on the Standard Drawings or as directed by the Engineer. The Department will measure for payment the maximum number of arrow panels in concurrent use at the same time on a single day on all sections of the contract. The Department will measure for payment the maximum number of Changeable Message Signs in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual Arrow Panels only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged Arrow Panels or for panels signs the Engineer directs be replaced due to poor condition or readability for payment. Retain possession of the Arrow Panels upon completion of the work.

BARRICADES

The Department will not measure barricades used in lieu of barrels and cones for channelization or delineation, but shall be incidental to Maintain and Control Traffic according to Section 112.04.01.

The Department will measure barricades used to protect pavement removal areas in individual units Each. The Department will measure for payment the maximum number of barricades in concurrent use at the same time on a single day on all sections of the contract. The Department will measure individual barricades only once for payment, regardless of how many times they are set, reset, removed, and relocated during the duration of the project. The Department will not measure replacements for damaged barricades the Engineer directs to be replaced due to poor condition or reflectivity. Retain possession of the Barricades upon completion of construction.

PAVEMENT MARKINGS

If there is to be a deviation from the existing striping plan, the Engineer will furnish the Contractor a striping plan prior to placement of the final surface course.

Install Temporary Striping according to Section 112 with the following exception:

If the Contractor's operations or phasing requires temporary markings that must subsequently be removed from the final surface course, use an approved removable lane tape; however, the Department will not measure removable lane tape for separate payment, but will measure and pay for removable lane tape as temporary striping.

Traffic Control Plan Page 3 of 3

PAVEMENT EDGE DROP-OFFS

Do not allow a pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation with an elevation difference greater than 1½". Place Warning signs (MUTCD W8-11 or W8-9A) in advance of and at 1500' intervals throughout the drop-off area. Dual post the signs on both sides of the traveled way. Wedge all transverse transitions between resurfaced and unresurfaced areas which traffic may cross with asphalt mixture for leveling and wedging. Remove the wedges prior to placement of the final surface course.

Protect pavement edges that traffic is not expected to cross, except accidentally, as follows:

Less than 2" - No protection required.

2" to 4" - Place plastic drums, vertical panels, or barricades every 50 feet. During daylight working hours only, the Engineer will allow the Contractor to use cones in lieu of plastic drums, panels, and barricades. Wedge the drop-off with DGA or asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Greater than 4" - Protect drop-offs greater than 4 inches within 10 feet of traffic by placing drums, vertical panels, or barricades every 25 feet. The Engineer will not allow the use of cones in lieu of drums, vertical panels, or barricades for drop-offs greater than 4". Place Type III Barricades directly in front of the drop-off facing on coming traffic in both directions of travel. Provide warning signs as shown on the Standard Drawings or as directed by the Engineer

Pedestrians & Bicycles - Protect pedestrian and bicycle traffic as directed by the engineer.

1-3830 Traffic Control Plan 3 or More Lanes Low ADT 01/02/2012

SPECIAL NOTE FOR PREFORMED QUADRAPOLE LOOPS

I. DESCRIPTION.

Except as specified herein, perform all work in accordance with the Departments 2012 Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions, and as directed by the Engineer. Article references are to the Standard Specifications. Furnish all materials, equipment, labor, and incidentals for placement of Preformed Quadrapole Loops, Preformed Loops, Preformed Loop/Lead-In, loop lead-in, conduit, junction boxes, wiring, and connection to the existing signal system.

A. PREBID REQUIREMENTS. Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize himself with existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made. Any claims resulting from site conditions will not be honored by the Department.

Information provided in this proposal and the types and quantities of work listed are not to be taken as an accurate or complete evaluation of the material and conditions to be encountered during construction. The bidder must draw their own conclusion as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the conditions encountered are not in accordance with the information shown.

It is not anticipated that utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities.

II. MATERIALS.

Except as provided herein, provide materials according to Section 723.02 and Section 835.

A. Preformed Quadrapole Loops or Preformed loops. All preformed loop wire shall be 16-gauge THWN stranded copper, single conductor in a 2-4-2 configuration for Quadrapole as shown on the Quadrapole Loop detail. If it is a 6'x6' loop, it shall have 3 turns installed in the preformed loop. The loop shall be housed in a class A oil resistant heavy-duty reinforced rubber hose with a 250-PSI internal pressure rating. Hose for the loop assembly shall be one continuous piece. The 3/8" I.D. (5/8" O.D.) hose shall be factory assembled. Preformed loops shall be pre-wired. The loop configuration lengths shall be assembled for the specific application. Hose tee connections shall be high temperature synthetic rubber. The tee shall be of proper size to attach directly to the hose, minimizing the glue joints. The tee shall have

Preformed Quadrapole Loops Page **2** of **14**

the same flexible properties as the hose to insure that the whole assembly can conform to pavement movement and shifting without cracking or breaking.

- **B. Preformed Loop/Lead-In.** All preformed loop/lead-in (homerun) wire shall be 16-gauge THWN stranded copper, single conductor in a 2 configuration for homerun wire as shown on the quadrapole Loop detail. The homerun wire is from the junction box to the edge of the quadrapole loop. The home run shall be housed in a class A oil resistant heavy-duty reinforced rubber hose with a 250-PSI internal pressure rating. Hose for the loop and home run wire assembly shall be one continuous piece from the hose tee. The 3/8" I.D. (5/8" O.D.) hose shall be factory assembled. Homerun wires shall be pre-wired. The homerun lengths shall be assembled for the specific application. Hose tee connections shall be high temperature synthetic rubber. The tee shall be of proper size to attach directly to the hose, minimizing the glue joints. The tee shall have the same flexible properties as the hose to insure that the whole assembly can conform to pavement movement and shifting without cracking or breaking.
- C. Maintain and Control Traffic. See Traffic Control Plan.
- **D. Sand.** Furnish natural sand meeting the requirements of 804.04.01.
- **E. Seeding.** Furnish Seed Mix Type I.
- **F. Loop Saw Slot and Fill.** Furnish loop sealant, backer rod, and non-shrink grout according to the Saw Slot Detail only if to be used for sawing into existing pavement. Usually, the preformed loops will be laid on the ground before placement of the JPC Pavement.
- **G. Junction Boxes.** Furnish electrical Junction Box type B, #57 Aggregate, and Geotextile Fabric Type IV according to the junction box detail.
- **H. Cable No. 14/1 Pair (Lead-In).** Furnish cable that is specified in section 835. Cable shall be run splice free. This shall include splice kits to connect to the preformed loop/lead-in (homerun).
- **I. Conduit.** Furnish and install appropriate conduit from transitions to the roadway, junction boxes and poles. See details below.

III. CONSTRUCTION METHODS.

Except as provided herein, construct and test Preformed Quadrapole Loops in accordance with applicable portions of Section 723.

A. Testing. The Contractor shall test all loops and cable no 14/1 pair (lead-in) according to section 723.03.17 before and after concrete inlays' construction. The Contractor may

Preformed Quadrapole Loops Page **3** of **14**

have to separate the loop from the lead-in to perform this test. If the loop/lead-in meets the requirement in section 723 at the controller cabinet, the loop/lead-in shall not be replaced. If the existing loop or preformed loop does not meet the requirement according to section 723.03.17 either before or after the concrete inlay, the loop shall be replaced. If the loop is replace before the concrete inlay, the Contractor shall verify that the loop meets the requirements per section 723.03.17 before the final concrete inlay is laid. If the loop does not meet per section 723.03.17, the Contractor shall replace the loop or preformed loop and it will be incidental to the concrete inlay bid item. The Contractor shall be responsible to re-splice the current loop to the lead-in with the proper splice as noted in the spec book (this will be incidental to the project).

- **B. Coordination.** Notify the Engineer in writing, two (2) weeks prior to beginning any work. The Engineer will contact and maintain liaison with the District Traffic Engineer and the Central Office Division of Traffic Operations to coordinate the Department's operations with the Contractor's work. The electrical Contractor shall coordinate with the general Contractor and inspector to ensure the preformed loops are located and installed prior to placing the concrete inlays for each lane, JPC Pavement and JPC Shoulders, and operational prior to opening JPC Pavement to traffic.
- **C. Connection.** The Contractor shall schedule all signal loop installation to ensure the new loops are connected to the lead-in and operational within 7 calendar days of the old loops being damaged and/or disconnected. This requirement includes damage caused by any work activity associated with the project. If the new signal loops are not functioning as intended following 7 calendar days, the Department may assess Liquidated Damages at a rate of \$500 per calendar day per signal location until the loops are operating at preconstruction conditions. All liquidated damages will be applied cumulatively.

D. Maintain and Control Traffic. See Traffic Control Plan.

- **E. Concrete Inlays.** The Contractor shall coordinate with the concrete Contractor and the resident Engineer to get preformed loops installed in a timely matter. The Contractor may have to use 1" PVC conduit in sections of the concrete inlay for transition from lane to lane so that the perform loop or perform loop/lead-in can be connected to the perform loop. The PVC conduit shall be incidental to the project. The Contractor may have to use the preformed to keep the loop functioning while the installation of the other concrete inlays lanes. The preformed loop may be attached to the top pavement as recommended by the manufacturer.
- **F. Milling.** If milling and texturing of the existing pavement, install preformed loops or preformed loop/lead-in in the existing pavement before or after performing the milling and texturing, bur prior to placement of the final asphalt surface course. If after milling the remnant contents of the existing saw slot (grout, loop wires, backer rod, and/or loop sealant) are not intact and flush with or below the top of the milled portion of the asphalt and with the saw slot completely filled with fines from the milling operation, clear the saw slot of loose remnant contents and refill the saw slot with natural sand. Obtain the

Preformed Quadrapole Loops Page 4 of 14

Engineer's approval of the stabilized saw slot prior to resurfacing. The Department will not measure for separate payment clearing and stabilizing the saw slot, but shall consider this work incidental to Asphalt Pavement Milling and Texturing.

G. Loop Saw Slot and Fill. This will only be used if installed in existing concrete or in asphalt. The following is a typical step by step procedure for the installation of a loop.

- Carefully mark the slot to be cut, perpendicular to the flow of traffic and centered in the lane.
- Make each saw-cut 3/4-inch wide and at a depth such that the top of the backer rod is a minimum of 4 inches below the surface of asphalt/concrete pavement.
- Drill a 1½ inch core hole at each corner and use a chisel to smooth corners to prevent sharp bends in the wire.
- Clean ALL foreign and loose matter out of the slots and drilled cores and within 1 foot on all sides of the slots using a high pressure washer.
- Completely dry the slots and drilled cores and within 1 foot on all sides of the slots.
- Measure 9-12 inches from the edge of the paved surface (shoulder break or face of curb) and drill a 1½ inch hole on a 45° angle to the conduit adjacent to the roadway. There will be one for each homerun.
- Closely inspect all cuts, cores, and slots for jagged edges or protrusions prior to the placement of the wire. All jagged edges and protrusions shall be ground or re-cut and cleaned again.
- Place the preformed loop and homerun splice-free from the termination point (cabinet or junction box) to the preformed loop.
- Push the preformed loop and homerun into the saw slot with a blunt object such as a wooden stick. Make sure that the preformed loop and homerun is pushed fully to the bottom of the saw slot. Screwdrivers shall not be used.
- Install duct sealant to a minimum of 1 inch deep into the cored 1½ inch hole.
- Apply loop sealant from the bottom up and fully encapsulate the preformed loop and homerun in the saw slot. The preformed loop and homerun should not be able to move when the sealant has set.
- Cover the encapsulated preformed loop and homerun with a continuous layer of backer rod along the entire loop and home run saw slots such that no voids are present between the loop sealant and backer rod.
- Finish filling the saw cut with non-shrinkable grout per manufacturer's instructions. Alleviate all air pockets and refill low spaces. There shall be no concave portion to the grout in the saw slot. Any excess grout shall be cleaned from the roadway to alleviate tracking.
- Clean up the site and dispose of all waste off the project.
- Ensure that the grout has completely cured prior to subjecting the loop to traffic. Curing time varies with temperature and humidity.

Preformed Quadrapole Loops Page **5** of **14**

- **H. Final Dressing, Clean Up, and Seeding.** After all work is completed, clean work sites and all disturbed areas. Dispose of all waste and debris off the right of way at sites obtained by the Contractor at no additional cost to the Department. Sow all disturbed earthen areas with Seed Mix Type I.
- **I Removal:** The Contractor shall remove all existing junction boxes, wire from spans/poles/junction boxes/conduits, and conduits. The removal will be incidental to the project.
- **J. Property/Roadway Damage.** The Contractor shall be responsible for all damage to public and/or private property resulting from the work. Upon completion of the work, restore all disturbed highway features and private property in like kind design and materials at no additional cost to the Department.
- **K. Right-of-Way Limits.** The Department has not established exact limits of Right-of-Way. Limit work activities to obvious Right-of-Way and work areas secured by the Department through Consent and Release of the adjacent property owners. Be responsible for all encroachments onto private lands.
- **L. Utility Clearance.** Work around and do not disturb existing utilities. The Department does not anticipate that existing utilities will require relocation; however, if utility relocation is required, the utility companies will work concurrently with the Contractor while relocating their facilities.
- **M. Caution.** Consider the information in this proposal and shown on the plans and the type of work listed herein to be approximate. Do not take the information to be an accurate evaluation of the materials and conditions to be encountered during construction. The bidder must draw their own conclusions as to the conditions encountered. The Department does not give any guarantee as to the accuracy of the data and will not consider any claims for additional compensation if the conditions encountered are not in accordance with the information shown.
- **N. Control.** Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor prior to incorporation into the work. The Department reserves the right to have other work performed by other Contractors and its own forces and to permit public utility companies and others to do work during the construction within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with each other's work will be reduced to a minimum. By submitting bid, the Contractor agrees to make no claims against the Department for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties

involved in order to assure the completion of the work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

O. Bore and Jack. If conduit is under pavement of any kind, bore and jack 2" rigid steel conduit under all pavement areas except for the area that the loop transitions from the saw slot. The installation of conduit should follow the detail below.

IV. MEASUREMENT

The Department will measure for payment only the bid items listed. See section 723.04 for bid item notes. All other items required to complete the construction shall be incidental to the bid items listed.

- A. Maintain and Control Traffic. See Traffic Control Plan.
- **B. Preformed Loop Quadrapole Loops.** Bid item 20453ES835 (Usually used for 6'x30' loops).
- **C. Preformed Loops**. Bid item 20452ES835 (Usually used for 6'x6' loops).
- **D. Preformed Loop/Lead-In.** Bid item 4894.
- **E. Cable No. 14/1 Pair**. Bid item 4850.
- **F. Loop Saw Slot and Fill.** Bid item 4895.
- **G. Conduit.** Bid item 4792, 4793, and 4795.
- **H. Trenching and Backfilling.** Bid item 4820.
- **I. Electrical Junction Box Type B.** Bid item 4811.
- J. Bore and Jack Conduit. Bid item 21543EN.

V. PAYMENT

The Department will make payment for the completed and accepted quantities of listed items according to Section 723.05. The Department will consider payment as full compensation for all work required under these notes and the Standard Specifications.

Preformed Quadrapole Loops Page **7** of **14**

VI. CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 723:

Subsection: 03.02 Poles and Bases installation.

Revision: Replace the first paragraph with the following:

Regardless of the station and offset noted, locate all poles/bases behind the guardrail a minimum of four feet from the front face of the guardrail to the front face of the pole base. Orient the handhole door away from traffic travel path. If pole base is installed within a sidewalk the top of the pole base shall be the same grade as the sidewalk.

Subsection: 03.02 Poles and Bases Installation.

Part: A) Steel Strain and Mast Arm Pole Installation.

Revision: Insert the following sentence at the beginning of the first paragraph:

Install pole bases 4 to 6 inches above grade.

Subsection: 03.02 Poles and Bases Installation.

Part: A) Steel Strain and Mast Arm Pole Installation.

Revision: Replace the second paragraph with the following:

For concrete base installation, see subsection 716.03.02 B), 2), paragraphs 2-6. Drilled shaft depth shall be based on the soil conditions encountered during drilling and slope condition at the site. Refer to the design chart below:

Subsection: 03.02 Poles and Bases Installation Part: B) Pedestal or Pedestal Post Installation.

Revision: Replace the second sentence with the following:

If over 12 feet high, the base shall have the minimum depth and diameter as subsection 716.03.02 (A), paragraph 2.

Subsection: 03.03 Trenching.

Revision: Replace the first sentence with the following:

See subsection 716.03.03 (B).

Subsection: 03.03 Trenching. Part: A) Under Roadway

Revision: Delete Part A) Under Roadway.

Subsection: 03.05 Conduit Requirements in Junction Boxes.

Revision: Delete the subsection and replace with the following:

23.03.05 Fuse Connector Kits. See subsection 716.03.09.

Subsection: 03.06 Coupling Installation.

Revision: Delete the subsection and replace with the following:

723.03.06 Painting. See subsection 716.03.15.

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Subsection: 03.07 Bonding Requirements.

Revision: Delete the subsection and replace with the following: 723.03.07 Electrical Junction Boxes. See subsection 716.03.10.

Subsection: 03.15 Painting

Revision: Remove title and change to Remove Signal Equipment. Replace entire note with the following:

Remove all traffic signal equipment that is identified by the Engineer as no longer necessary including, but not limited to, the following: pole bases, poles, junction boxes, cabinets, wood poles, and advance warning flashers. Pole bases shall be removed a minimum of one foot below finished grade by chipping off or other method that is approved by the Engineer. Dispose of all removed concrete off right-of-way. Wood poles shall be removed a minimum of one foot below finished grade. Backfill holes with material approved by the Engineer. Conduit may be abandoned in the ground. Contact the District Traffic Engineer to determine if any removed signal equipment needs to be returned to the district and to determine the location/time for such deliveries.

Subsection: 03.17 Acceptance and Inspection Requirements.

Revision: Replace the first paragraph of the section with the following:

See subsection 105.12. In coordination with the District Traffic Engineer, energize traffic control device as soon as it is fully functional and ready for inspection. After the work has been completed, conduct an operational test demonstrating that the system operates in accordance with the plans in the presence of the Engineer. The Department will also conduct its own tests with its own equipment before final acceptance. Ensure that the traffic control device remains operational until the Division of Traffic Operations has provided written acceptance of the electrical work.

Subsection: 04.01 Conduit.

Revision: Replace the second sentence of the subsection with the following:

The Department will not measure conduit fittings, ground lugs, test plugs, expansion joints, and clamps for payment and will consider them incidental to this item of work.

Subsection: 04.02 Junction Box.

Revision: Replace the subsection with the following:

The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure additional junction boxes for greater depths than those identified in plans, aggregate (#57), backfilling, restoration of disturbed areas to the satisfaction of the Engineer, geotextile fabric, concrete, hot dipped galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment and will consider them incidental to this item of work.

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Subsection: 04.03 Trenching and Backfilling.

Revision: Replace the second sentence with the following:

The Department will not measure excavation, backfilling, underground utility warning tape, and the restoration of disturbed areas to original condition for payment and will consider them incidental to this item of work.

Subsection: 04.05 Loop Wire.

Revision: Replace the second sentence of the subsection with the following:

The Department will not measure splice boots, cable rings, and any other necessary hardware for payment and will consider them incidental to this item of work.

Subsection: 04.06 Cable.

Revision: Replace the second sentence of the subsection with the following:

The Department will not measure splice boots, cable rings, and any other hardware for payment and will consider them incidental to this item of work.

Subsection: 04.15 Loop Saw Slot and Fill.

Revision: Replace the second sentence of the subsection with the following:

The Department will not measure sawing, cleaning, filling induction loop saw slot, loop sealant, backer rod, drilling hole for conduit, and grout for payment and will consider them incidental to this item of work.

Subsection: 04.30 Bore And Jack Conduit.

Revision: Replace the paragraph with the following:

The Department will measure the quantity in linear feet. This item shall include all work necessary for boring and installing conduit under an existing roadway.

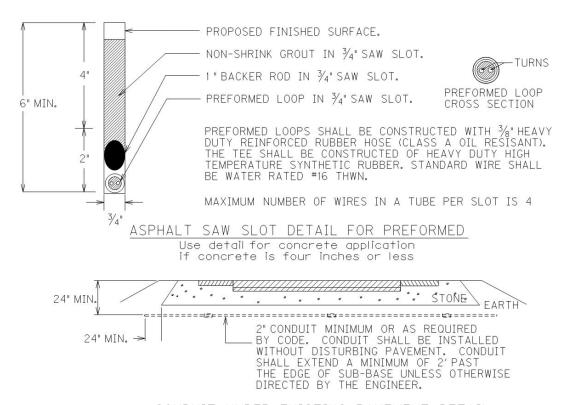
VII. CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 716:

Subsection: 03.04 conduit installation.

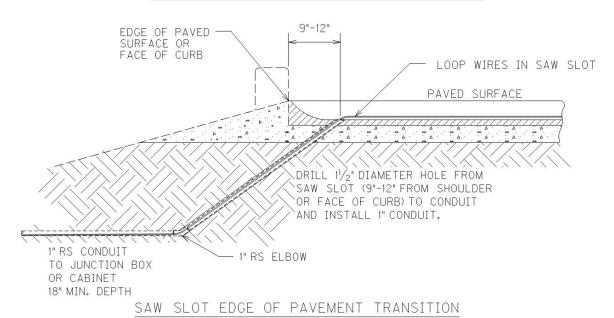
Revision: Add the following Part G to the subsection:

G) Bore and Jack. Construction methods shall be in accordance with subsections 706.03.02, paragraphs 1, 2 and 4.

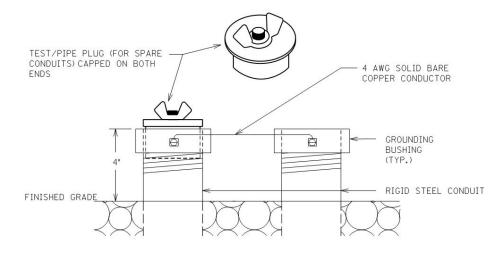
Preformed Quadrapole Loops Page **10** of **14**



CONDUIT UNDER EXISTING PAVEMENT DETAIL

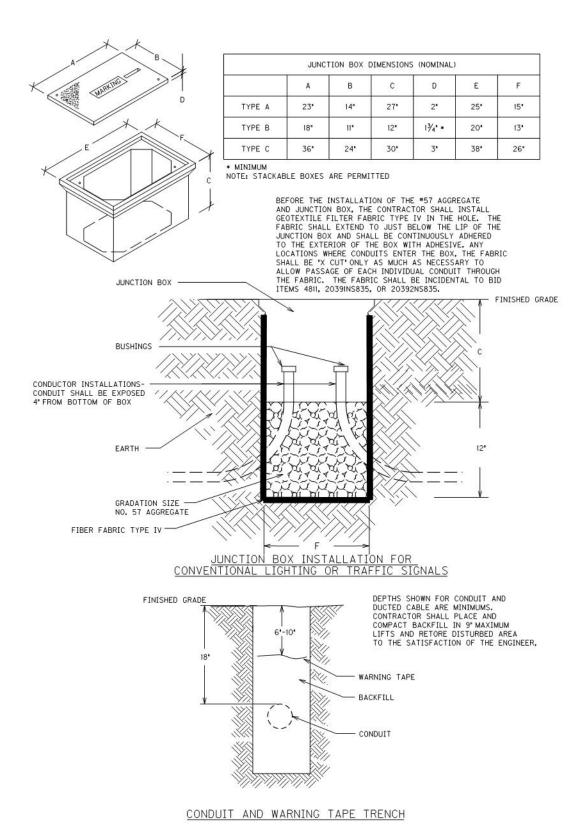


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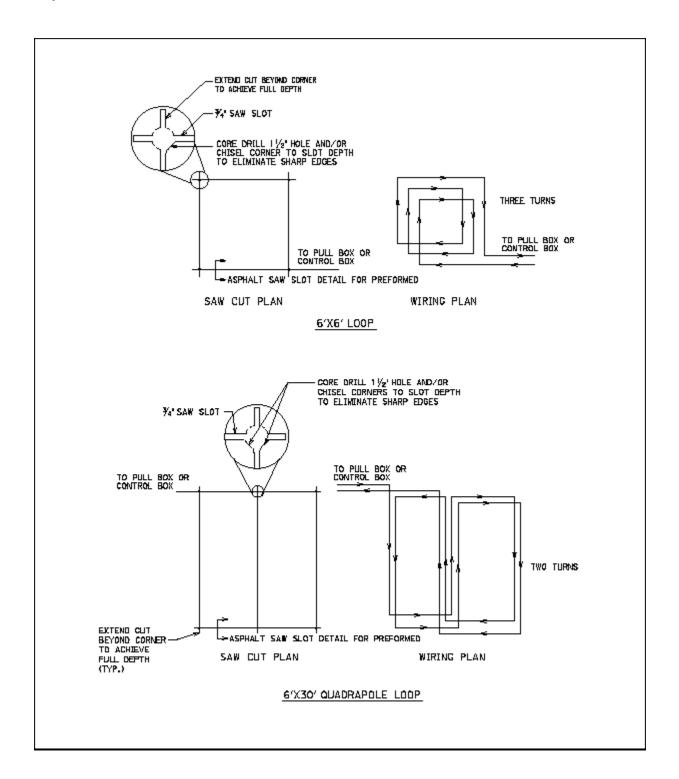


TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL

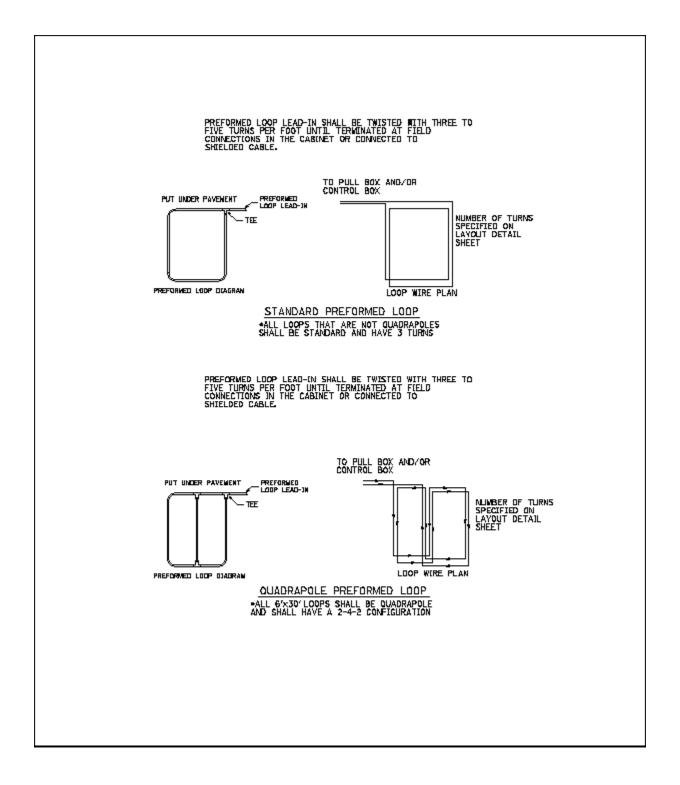
Preformed Quadrapole Loops Page **12** of **14**



Preformed Quadrapole Loops Page **13** of **14**

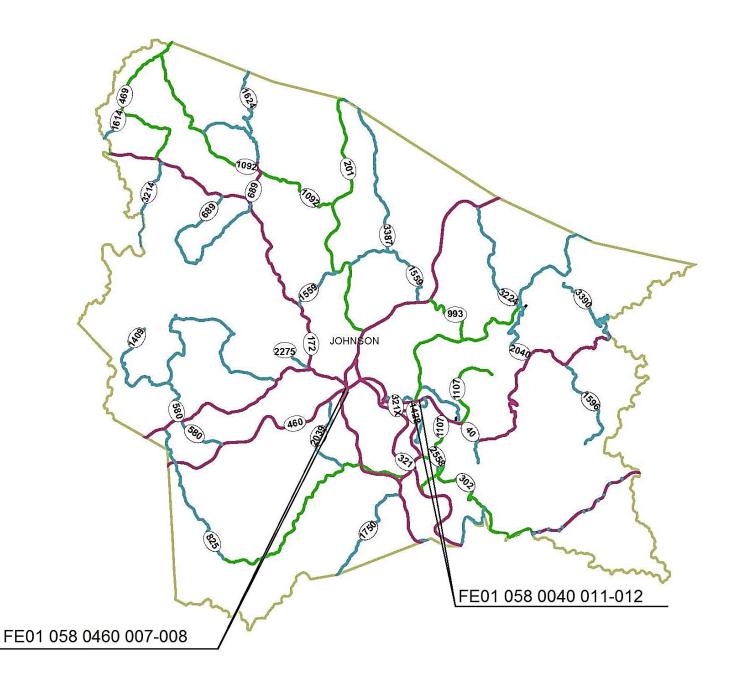


Preformed Quadrapole Loops Page **14** of **14**



JOHNSON COUNTY 058GR16P094-FE01

JOHNSON





MATERIAL SUMMARY

CONTRACT ID: 162266	058GR16P094-FE01	MP05800401602
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PAINTSVILLE TO MEALLY ROAD (KY 40) BEGIN 770 FEET EAST OF KY 1428 EXTENDING EAST TO THE BEGINNING OF LEVISA FORK OF BIG SANDY BRIDGE JPC PAVEMENT, A DISTANCE OF .1 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit	
0005	00001	DGA BASE	335.00	TON	
0010	01830	STANDARD INTEGRAL CURB	952.00	LF	
0015	01902	REMOVE INTEGRAL CURB	501.00	LF	
0020	02014	BARRICADE-TYPE III	4.00	EACH	
0025	02058	REMOVE PCC PAVEMENT	2,070.00	SQYD	
0030	02073	JPC PAVEMENT-9 IN	2,469.00	SQYD	
0035	02101	CEM CONC ENT PAVEMENT-8 IN	70.00	SQYD	
0040	02200	ROADWAY EXCAVATION	209.00	CUYD	
0045	02562	TEMPORARY SIGNS	250.00	SQFT	
0050	02650	MAINTAIN & CONTROL TRAFFIC - (US 40)	1.00	LS	
0055	02653	LANE CLOSURE	3.00	EACH	
0060	02720	SIDEWALK-4 IN CONCRETE	318.00	SQYD	
0065	02721	REMOVE CONCRETE SIDEWALK	106.00	SQYD	
0070	02726	STAKING - (US 40)	1.00	LS	
0075	04934	TEMP SIGNAL MULTI PHASE	1.00	EACH	
0080	05985	SEEDING AND PROTECTION	200.00	SQYD	
0085	06514	PAVE STRIPING-PERM PAINT-4 IN	1,300.00	LF	
0090	06549	PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF	
0095	06550	PAVE STRIPING-TEMP REM TAPE-W	1,500.00	LF	
0100	06567	PAVE MARKING-THERMO STOP BAR-12IN	16.00	LF	
0105	10020NS	FUEL ADJUSTMENT	838.00	DOLL	
0110	23158ES505	DETECTABLE WARNINGS - (NEW)	10.00	SQFT	
0115	00462	CULVERT PIPE-18 IN	20.00	LF	
0120	01459	CURB BOX INLET TYPE A MOD	1.00	EACH	
0125	01490	DROP BOX INLET TYPE 1	1.00	EACH	
0130	02569	DEMOBILIZATION	1.00	LS	

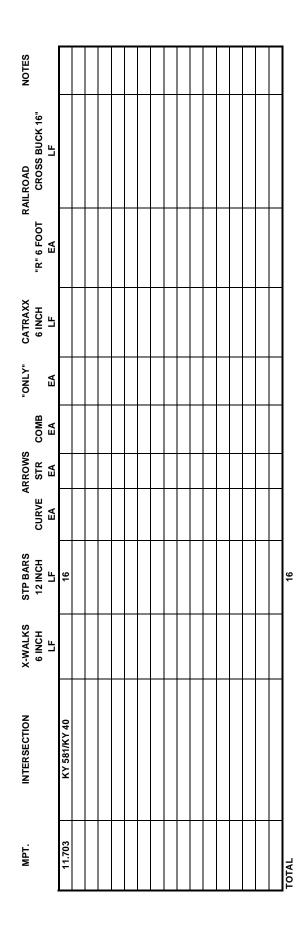
MATERIAL SUMMARY

CONTRACT ID: 162266	058GR16P094-FE01	MP05804601601
CONTRACT ID: 162266	058GR16P094-FE01	MP05804601601

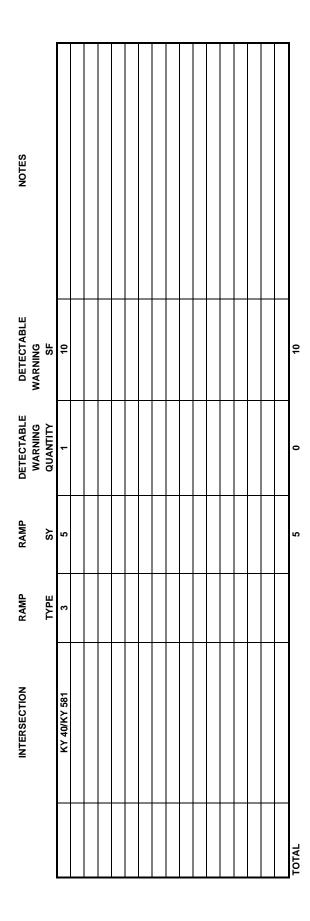
SALYERSVILLE TO PAINTSVILLE ROAD (US 460) BEGIN 1594 FEET EAST OF BROOKS CONLEY ROAD EXTENDING EAST 21 FEET WEST OF KY 40 JPC PAVEMENT, A DISTANCE OF .08 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	00071	CRUSHED AGGREGATE SIZE NO 57	105.00	TON
0010	00078	CRUSHED AGGREGATE SIZE NO 2	2.00	TON
0015	02014	BARRICADE-TYPE III	2.00	EACH
0020	02058	REMOVE PCC PAVEMENT	606.00	SQYD
0025	02071	JPC PAVEMENT-11 IN	606.00	SQYD
0030	02562	TEMPORARY SIGNS	190.00	SQFT
0035	02599	FABRIC-GEOTEXTILE TYPE IV	606.00	SQYD
0040	02650	MAINTAIN & CONTROL TRAFFIC - (US 460)	1.00	LS
0045	02653	LANE CLOSURE	3.00	EACH
0050	02775	ARROW PANEL	2.00	EACH
0055	04793	CONDUIT-1 1/4 IN	50.00	LF
0060	04811	ELECTRICAL JUNCTION BOX TYPE B	1.00	EACH
0065	04894	PREFORMED LOOP/LEAD-IN	50.00	LF
0070	06514	PAVE STRIPING-PERM PAINT-4 IN	750.00	LF
0075	06550	PAVE STRIPING-TEMP REM TAPE-W	2,000.00	LF
0800	06568	PAVE MARKING-THERMO STOP BAR-24IN	13.00	LF
0085	06574	PAVE MARKING-THERMO CURV ARROW	3.00	EACH
0090	20453ES835	PREFORMED QUADRAPOLE LOOPS	102.00	LF
0095	01000	PERFORATED PIPE-4 IN	530.00	LF
0100	01010	NON-PERFORATED PIPE-4 IN	60.00	LF
0105	01024	PERF PIPE HEADWALL TY 2-4 IN	2.00	EACH
0110	02569	DEMOBILIZATION	1.00	LS

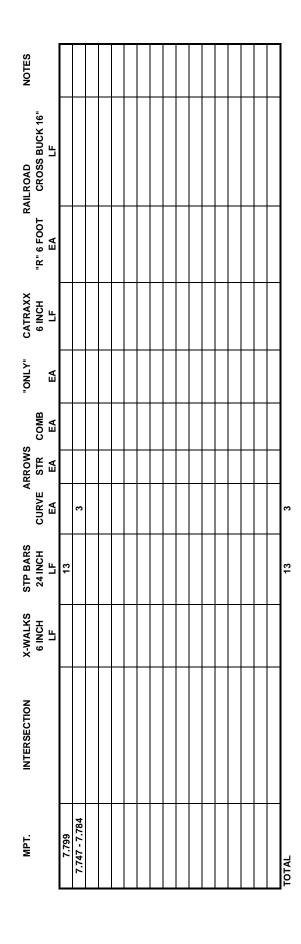
Johnson County
THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY
FE01 058 0040 011-012



Johnson County SIDEWALK RAMP AND DETECTABLE WARNING SUMMARY FE01 058 0040 011-012



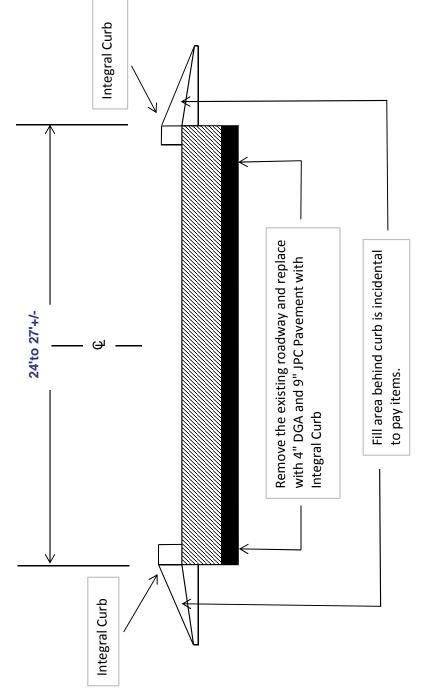
Johnson County THERMOPLASTIC INTERSECTION PAVEMENT MARKINGS SUMMARY FE01 058 0460 007-008



TYPICAL SECTION

Johnson County

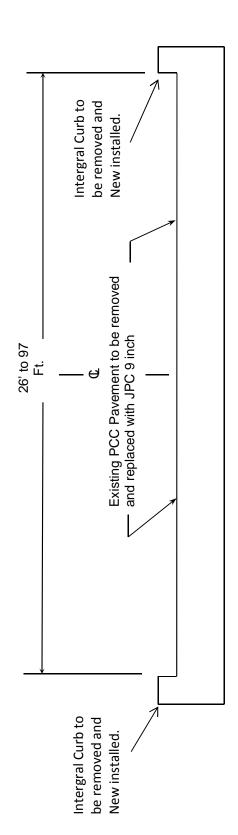
FE01 058 0040 011-012 Station 9+50 to 10+97



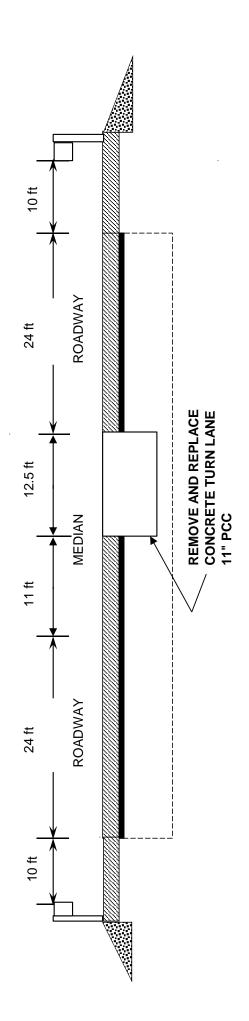
Page 1

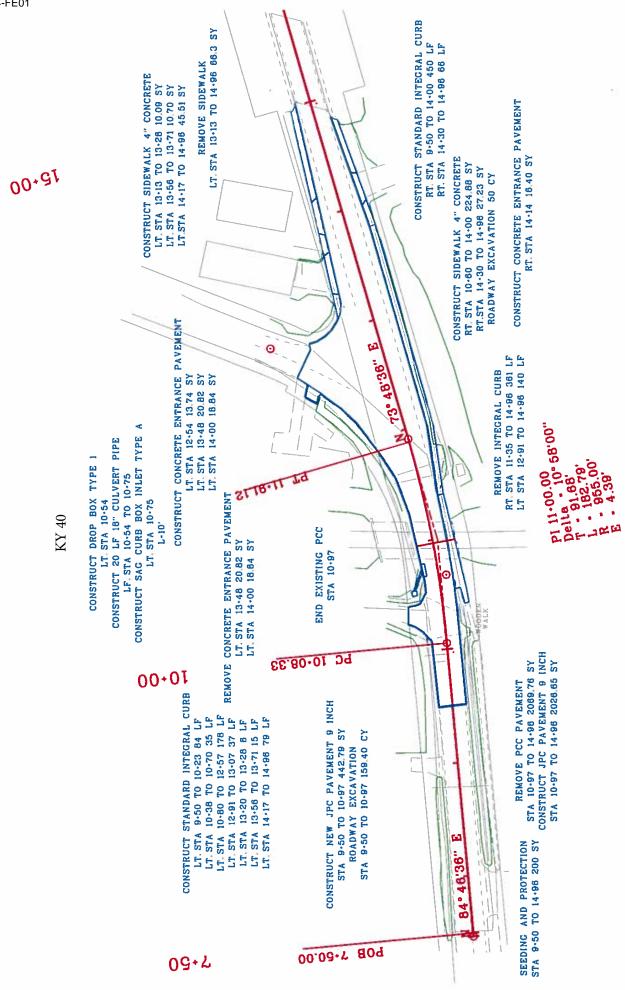
TYPICAL SECTION FE01 058 0040 011-012 JOHNSON COUNTY

STATION 10+97 to 14+96



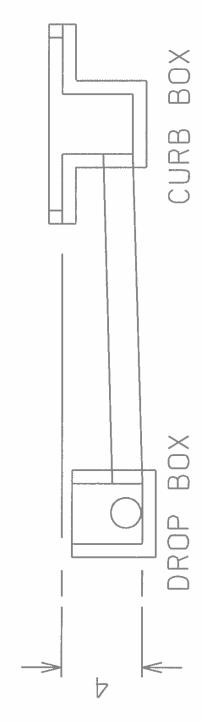
JOHNSON COUNTY FE01 058 0460 007-008 TYPICAL SECTION MP 7.723 TO MP 7.800

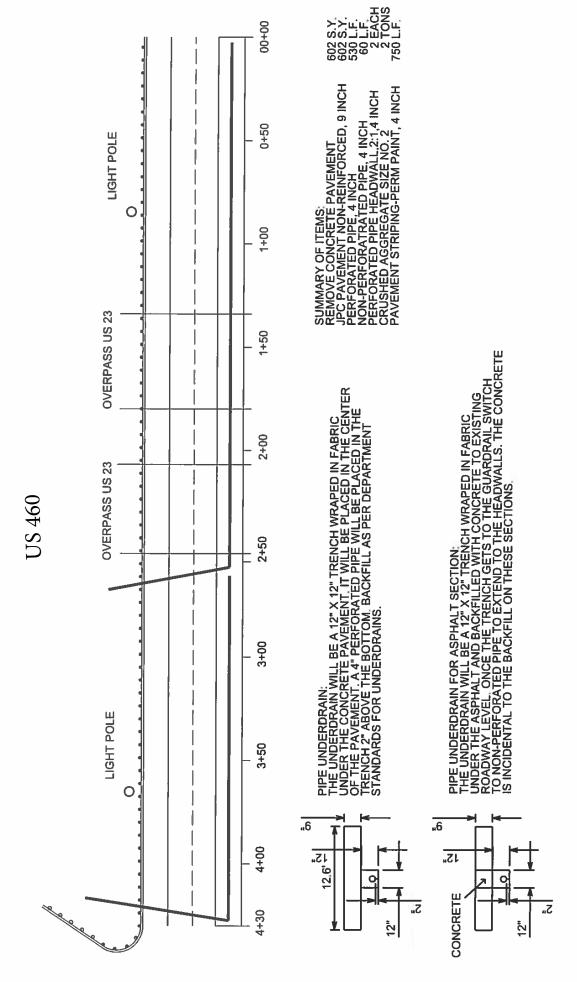




KY 40

THERE SHOULD BE A FOUR FOOT DIFFERANCE BETWEEN THE FLOW LINE OF THE DROP BOX AND THE ROADWAY SURFACE ELEVATION FOR DETERMINING DIMENTIONS.





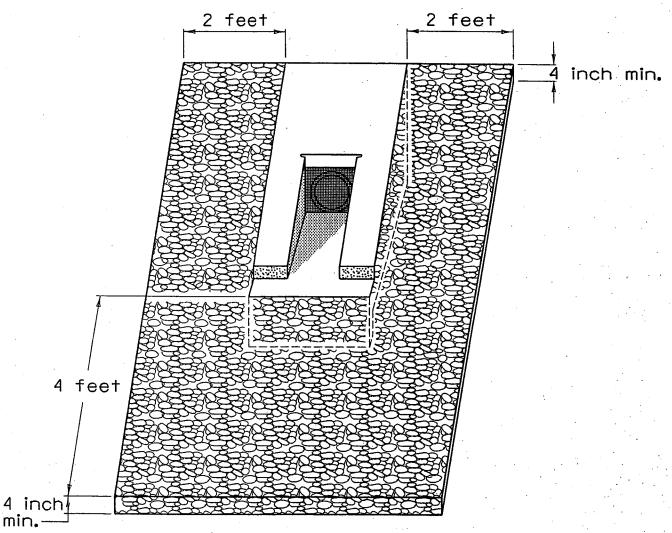
DETAIL SHEET FOR PAVEMENT SUBSURFACE DRAINAGE OUTLET

Use approximately one ton of Crushed Aggregate Size No. 2 at all Perforated Pipe Headwall Outlets as illustrated in the detail below. Place Crushed Aggregate Size No. 2 to a minimum depth of 4" as detailed below.

Use Dense Graded Aggregate (DGA) removed during placement of the Crushed Aggreagate Size No. 2 to dress existing shoulders where DGA is exposed. Waste other materials removed during placement of the Crushed Aggregate Size No. 2 as directed by the Engineer. The Department will make no direct payment for disposal of wasted material.

The Department will consider payment for Crushed Aggregate Size No. 2 as full compensation for all materials, labor, and other incidentals necessary to place Crushed Aggregate Size No. 2 for vegetation control and/or erosion control at pavement edge drain outlets.

See current Standard Drawing RDP-010 for dimensions and other details.



PERFORATED PIPE HEADWALL OUTLET

PART II

SPECIFICATIONS AND STANDARD DRAWINGS

SPECIFICATIONS REFERENCE

Any reference in the plans or proposal to previous editions of the *Standard Specifications* for Road and Bridge Construction and Standard Drawings are superseded by Standard Specifications for Road and Bridge Construction, Edition of 2012 and Standard Drawings, Edition of 2016.

Subsection	101.03 DEFINITIONS				
Revision:	Add the following Definitions to this section:				
Revision.	Superpave Mix Design Technologist (SMDT) - An inspector qualified by the KYTC to				
	submit, adjust, or approve asphalt mix designs.				
	submit, adjust, of approve asphale mix designs.				
	Superpave Plant Technologist (SPT) - An inspector qualified by the KYTC to perform				
	routine inspection and process control, acceptance, or verification testing on asphalt mixtures.				
Subsection:	102.15 Process Agent.				
Revision:	Replace the 1st paragraph with the following:				
	Every corporation doing business with the Department shall submit evidence of compliance				
	with KRS Sections 14A.4-010, 271B.11-010, 271B.11-070, 271B.11-080, 271B.5-010 and				
	271B.16-220, and file with the Department the name and address of the process agent upon				
	whom process may be served.				
Subsection:	105.13 Claims Resolution Process.				
Revision:	Delete all references to TC 63-34 and TC 63-44 from the subsection as these forms are no				
	longer available through the forms library and are forms generated within the AASHTO				
	SiteManager software.				
Subsection:	108.01 Subcontracting of Contract.				
Revision:	Replace the section with the following:				
	Do not subcontract, sell, transfer, assign, or otherwise dispose of the Contract or any portion of				
	the Contract or Contracts, or of the right, title, or interest therein, without the Engineer's				
	written consent. If the Contractor chooses to subcontract any portion of the Contract, a written				
	request to sublet work must be submitted on the Subcontract Request (TC 63-35) form for the				
	Engineer's approval. When directed by the Engineer, submit a certified copy of the actual				
	subcontract agreement executed between the parties.				
	The Engineer will allow the Contractor to subcontract a portion, but the Contractor must				
	perform with his own organization work amounting to no less than 30 percent of the total				
	Contract cost. The Engineer will not allow any subcontractor to exceed the percentage to be				
	performed by the Contractor and will require the Contractor to maintain a supervisory role over				
	the entire project.				
	Do not allow any subcontractor to further subcontract any portion of the work without				
	obtaining written consent from the Engineer. When the Engineer gives such consent, the first				
	tier subcontractor may further subcontract a portion of his work not to exceed 50 percent of the				
	work originally subcontracted to him by the Contractor. Do not allow any second tier				
	subcontractor to subcontract any portion of the work.				
	Extra work performed by subcontractors in accordance with Section 109 will not be utilized in				
	the computation of total dollar amount subcontracted. Subcontract percentages are based upon				
	the original contract amount.				
	Payment to subcontractors for satisfactory performance of their work or materials supplied must				
	be made within 7 calendar days from receipt of payment from the Engineer. Upon request by				
	the Engineer, provide proof that payment has been made to the subcontractor within the 7				
	calendar days. Progress payments may be withheld for failure to comply with this request				
	carefular days. Trogress payments may be withinclu for famure to compry with this request				

The Engineer's written consent to subcontract, assign, or otherwise dispose of any portion of the Contract does not, under any circumstances, relieve the Contractor or the surety of their respective liabilities and obligations under the Contract. The Engineer will make transactions only with the Contractor. The Engineer will recognize subcontractors only in the similar capacity of employees or workers of the Contractor who are subject to the same requirements as to character and competence as specified in Subsection 108.06.

Lease agreements are acceptable on Department projects. No additional paperwork is needed when equipment is rented from a commercial rental company unless the leased equipment comes with an operator. In these circumstances, payroll records for the operator of the leased equipment must be maintained and submitted by the contractor in accordance with Department policy.

Lease agreements between contractors that involve equipment only will require the submittal of a TC 63-71 Department Equipment Rental Form. If a Contractor is found to be in violation of these requirements, the Engineer reserves the right to withhold payment for the work which was performed in violation of these requirements. This provision does not include the lease or use of equipment from a corporation or company wholly owned by the Contractor. The Contractor shall not use equipment in the performance of the Contract to which title is not held by the Contractor or an approved subcontractor without a submitted lease agreement.

If a public official has provided a documented Declaration of Emergency, then the Engineer may verbally waive the requirement of submitting a TC 63-71 Department Equipment Rental Form until the situation has ended. After the emergency situation ends, immediately remove the equipment from the project or submit a completed TC 63-71 Department Equipment Rental Form to the Engineer.

108.03 Preconstruction Conference.

Revision:

Replace 8) Staking with the following:

8) Staking (designated by a Professional Engineer or Land Surveyor licensed in the Commonwealth of Kentucky.

Subsection:

109.07.02 Fuel.

Revision:

Revise item Crushed Aggregate Used for Embankment Stabilization to the following:

Crushed Aggregate

Used for Stabilization of Unsuitable Materials

Used for Embankment Stabilization

Delete the following item from the table.

Crushed Sandstone Base (Cement Treated)

Subsection:

110.02 Demobilization.

Revision:

Replace the first part of the first sentence of the second paragraph with the following:

Perform all work and operations necessary to accomplish final clean-up as specified in the first paragraph of Subsection 105.12;

paragraph of Subsection 103.12,

Subsection:

112.03.12 Project Traffic Coordinator (PTC).

Revision:

Replace the last paragraph of this subsection with the following:

Ensure the designated PTC has sufficient skill and experience to properly perform the task assigned and has successfully completed the qualification courses.

Subsection:	112.04.18 Diversions (By-Pass Detours).			
Revision:	Insert the following sentence after the 2nd sentence of this subsection.			
	The Department will not measure temporary drainage structures for payment when the contract			
	documents provide the required drainage opening that must be maintained with the diversion.			
	The temporary drainage structures shall be incidental to the construction of the diversion. If the			
contract documents fail to provide the required drainage opening needed for the				
	cost of the temporary drainage structure will be handled as extra work in accordance with			
	section 109.04.			
Subsection:	201.03.01 Contractor Staking.			
Revision:	Replace the first paragraph with the following: Perform all necessary surveying under the			
	general supervision of a Professional Engineer or Land Surveyor licensed in the			
	Commonwealth of Kentucky.			
Subsection:	201.04.01 Contractor Staking.			
Revision:	Replace the last sentence of the paragraph with the following: Complete the general layout of			
	the project under the supervision of a Professional Engineer or Land Surveyor licensed in the			
	Commonwealth of Kentucky.			
Subsection:	206.04.01 Embankment-in-Place.			
Revision:	Replace the fourth paragraph with the following: The Department will not measure suitable			
	excavation included in the original plans that is disposed of for payment and will consider it			
	incidental to Embankment-in-Place.			
Subsection:	208.02.01 Cement.			
Revision:	Replace paragraph with the following:			
	Select Type I or Type II cement conforming to Section 801. Use the same type cement			
	throughout the work.			
Subsection:	208.03.06 Curing and Protection.			
Revision:	Replace the fourth paragraph with the following:			
	Do not allow traffic or equipment on the finished surface until the stabilized subgrade has			
	cured for a total of 7-days with an ambient air temperature above 40 degrees Fahrenheit. A			
	curing day consists of a continuous 24-hour period in which the ambient air temperature does			
	not fall below 40 degrees Fahrenheit. Curing days will not be calculated consecutively, but			
	must total seven (7), 24-hour days with the ambient air temperature remaining at or above 40			
	degrees Fahrenheit before traffic or equipment will be allowed to traverse the stabilized			
	subgrade. The Department may allow a shortened curing period when the Contractor requests.			
	The Contractor shall give the Department at least 3 day notice of the request for a shortened			
	curing period. The Department will require a minimum of 3 curing days after final compaction.			
	The Contractor shall furnish cores to the treated depth of the roadbed at 500 feet intervals for			
	each lane when a shortened curing time is requested. The Department will test cores using an			
	unconfined compression test. Roadbed cores must achieve a minimum strength requirement of			
	80 psi.			
Subsection:	208.03.06 Curing and Protection.			
Revision:	Replace paragraph eight with the following:			
110 (151011)	At no expense to the Department, repair any damage to the subgrade caused by freezing.			
	a to the substitute to the separations, repair any damage to the substitute educed by freezing.			

	Effective with the April 29, 2016 Letting
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Revision:	Revise Seed Mix Type I to the mixture shown below:
	50% Kentucky 31 Tall Fescue (Festuca arundinacea)
	35% Hard Fescue (Festuca (Festuca longifolia)
	10% Ryegrass, Perennial (Lolium perenne)
	5% White Dutch Clover (Trifolium repens)
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	2)
Revision:	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 4, 5, 6, and 7. Apply seed
	mix Type II at a minimum application rate of 100 pounds per acre. If adjacent to a golf course
	replace the crown vetch with Kentucky 31 Tall Fescue.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	A) Seed Mixtures for Permanent Seeding.
Number:	3)
Revision:	Replace the paragraph with the following:
	Permanent Seeding on Slopes Greater than 3:1 in Highway Districts 1, 2, 3, 8, 9, 10, 11, and
	12. Apply seed mix Type III at a minimum application rate of 100 pounds per acre. If adjacent
	to crop land or golf course, replace the Sericea Lespedeza with Kentucky 31 Fescue.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Delete the first sentence of the section.
Subsection:	212.03.03 Permanent Seeding and Protection.
Part:	B) Procedures for Permanent Seeding.
Revision:	Replace the second and third sentence of the section with the following:
	Prepare a seedbed and apply an initial fertilizer that contains a minimum of 100 pounds of
	nitrogen, 100 pounds of phosphate, and 100 pounds of potash per acre. Apply agricultural
	limestone to the seedbed when the Engineer determines it is needed. When required, place
	agricultural limestone at a rate of 3 tons per acre.
	212.03.03 Permanent Seeding and Protection.
Part:	D) Top Dressing.
Revision:	Change the title of part to D) Fertilizer.
	212.03.03 Permanent Seeding and Protection.
Part:	D) Fertilizer.
Revision:	Replace the first paragraph with the following:
	Apply fertilizer at the beginning of the seeding operation and after vegetation is established.
	Use fertilizer delivered to the project in bags or bulk. Apply initial fertilizer to all areas prior to
	the seeding or sodding operation at the application rate specified in 212.03.03 B). Apply 20-10-
	10 fertilizer to the areas after vegetation has been established at a rate of 11.5 pounds per 1,000
	square feet. Obtain approval from the Engineer prior to the 2nd fertilizer application. Reapply
	fertilizer to any area that has a streaked appearance. The reapplication shall be at no additional
	cost to the Department. Re-establish any vegetation severely damaged or destroyed because of
Subsection:	an excessive application of fertilizer at no cost to the Department.
Part:	212.03.03 Permanent Seeding and Protection. D) Fertilizer.
Revision:	
Kevision:	Delete the second paragraph.

C	212 04 04 A ariantenal Limeatons				
	212.04.04 Agricultural Limestone. Replace the entire section with the following:				
Revision:					
C14	The Department will measure the quantity of agricultural limestone in tons.				
	212.04.05 Fertilizer.				
Revision:	Replace the entire section with the following:				
	The Department will measure fertilizer used in the seeding or sodding operations for payment.				
G 1 4	The Department will measure the quantity by tons.				
	212.05 PAYMENT.				
Revision:	Delete the following item code:				
	Code Pay Item Pay Unit				
Cbasation.	05966 Topdressing Fertilizer Ton 212.05 PAYMENT.				
Revision:	Add the following pay items:				
	Code Pay Item Pay Unit 05963 Initial Fertilizer Ton				
	05964 20-10-10 Fertilizer Ton				
Subsection:	05992 Agricultural Limestone Ton 213.03.02 Progress Requirements.				
Revision:	213.03.02 Progress Requirements.				
Kevision.					
	Replace the third paragraph with the following:				
	After exposing areas of erodible material, make every effort to stabilize and protect the areas as				
	quickly as possible. Permanently seed and mulch all areas at final grade within 14 days.				
	Temporary stabilization practices on those portions of the project where construction activities				
	have temporarily ceased shall be initiated within 14 days of the date of activity cessation. The				
	Engineer will suspend grading operations for instances where the Contractor fails to sustain				
	erosion control measures to effectively control erosion and to prevent water pollution in				
	accordance with the KPDES Permit. In addition, the Engineer will withhold monies due on				
	current estimates until corrective work has been initiated and is continuously progressing to				
	remediate noted deficiencies. Additionally, should noted deficiencies not be adequately				
	addressed to the satisfaction of the Engineer within 7 calendar days of receipt of written				
	notification of deficiencies, the Department will apply a penalty equal to the daily liquidated				
	damages rate until all aspects of the work have been completed.				
	213.03.05 Temporary Control Measures.				
Part:	E) Temporary Seeding and Protection.				
Revision:	Delete the second sentence of the first paragraph.				
	304.02.01 Physical Properties.				
Table:	Required Geogrid Properties				
Revision:	Replace all references to Test Method "GRI-GG2-87" with ASTM D 7737.				
	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '				
Part:	B) Sampling.				
Revision:	Replace the second sentence with the following:				
	The Department will determine when to obtain the quality control samples using the random-				
	number feature of the mix design submittal and approval spreadsheet. The Department will				
	randomly determine when to obtain the verification samples required in Subsections 402.03.03				
	and 402.03.04 using the Asphalt Mixture Sample Random Tonnage Generator.				

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

Part: D) Testing Responsibilities.

3) VMA. Number:

Revision: Add the following paragraph below Number 3) VMA:

> Retain the AV/VMA specimens and one additional corresponding G_{mm} sample for 5 working days for mixture verification testing by the Department. For Specialty Mixtures, retain a mixture sample for 5 working days for mixture verification testing by the Department. When the Department's test results do not verify that the Contractor's quality control test results are within the acceptable tolerances according to Subsection 402.03.03, retain the samples and

specimens from the affected sublot(s) for the duration of the project.

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

D) Testing Responsibilities. Part:

4) Density. Number:

Revision: Replace the second sentence of the Option A paragraph with the following:

Perform coring by the end of the following work day.

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

D) Testing Responsibilities. Part:

Number: 5) Gradation.

Revision: Delete the second paragraph.

Subsection: 402.03.02 Contractor Quality Control and Department Acceptance.

H) Unsatisfactory Work. Part: 1) Based on Lab Data. Number:

Replace the second paragraph with the following: **Revision:**

> When the Engineer determines that safety concerns or other considerations prohibit an immediate shutdown, continue work and the Department will make an evaluation of

acceptability according to Subsection 402.03.05.

402.03.03 Verification. **Subsection:**

Replace the first paragraph with the following: **Revision:**

> **402.03.03 Mixture Verification.** For volumetric properties, the Department will perform a minimum of one verification test for AC, AV, and VMA according to the corresponding procedures as given in Subsection 402.03.02. The Department will randomly determine when to obtain the verification sample using the Asphalt Mixture Sample Random Tonnage Generator. For specialty mixtures, the Department will perform one AC and one gradation determination per lot according to the corresponding procedures as given in Subsection 402.03.02. However, Department personnel will not perform AC determinations according to KM 64-405. The Contractor will obtain a quality control sample at the same time the Department obtains the mixture verification sample and perform testing according to the procedures given in Subsection 402.03.02. If the Contractor's quality control sample is verified by the Department's test results within the tolerances provided below, the Contractor's sample will serve as the quality control sample for the affected sublot. The Department may perform the mixture verification test on the Contractor's equipment or on the Department's equipment.

Subsection: 402.03.03 Verification.

A) Evaluation of Sublot(s) Verified by Department. Part:

Revision: Replace the third sentence of the second paragraph with the following:

> When the paired t-test indicates that the Contractor's data and Department's data are possibly not from the same population, the Department will investigate the cause for the difference according to Subsection 402.03.05 and implement corrective measures as the Engineer deems appropriate.

G 1	402 03 03 XI ' ' C' ' ('				
	402.03.03 Verification.				
Part:	B) Evaluation of Sublots Not Verified by Department.				
Revision:	Replace the third sentence of the first paragraph with the following:				
	When differences between test results are not within the tolerances listed below, the				
	Department will resolve the discrepancy according to Subsection 402.03.05.				
	402.03.03 Verification.				
Part:	B) Evaluation of Sublots Not Verified by Department.				
Revision:	Replace the third sentence of the second paragraph with the following:				
	When the <i>F</i> -test or <i>t</i> -test indicates that the Contractor's data and Department's data are possibly				
	not from the same population, the Department will investigate the cause for the difference				
	according to Subsection 402.03.05 and implement corrective measures as the Engineer deems				
	appropriate.				
Subsection:	402.03.03 Verification.				
Part:	C) Test Data Patterns.				
Revision:	Replace the second sentence with the following:				
	When patterns indicate substantial differences between the verified and non-verified sublots,				
	the Department will perform further comparative testing according to subsection 402.03.05.				
Subsection:	402.03 CONSTRUCTION.				
Revision:	Add the following subsection: 402.03.04 Testing Equipment and Technician Verification.				
	For mixtures with a minimum quantity of 20,000 tons and for every 20,000 tons thereafter, the				
	Department will obtain an additional verification sample at random using the Asphalt Mixture				
	Sample Random Tonnage Generator in order to verify the integrity of the Contractor's and				
	Department's laboratory testing equipment and technicians. The Department will obtain a				
	mixture sample of at least 150 lb at the asphalt mixing plant according to KM 64-425 and split				
	it according to AASHTO R 47. The Department will retain one split portion of the sample and				
	provide the other portion to the Contractor. At a later time convenient to both parties, the				
	Department and Contractor will simultaneously reheat the sample to the specified compaction				
	temperature and test the mixture for AV and VMA using separate laboratory equipment				
	according to the corresponding procedures given in Subsection 402.03.02. The Department				
	will evaluate the differences in test results between the two laboratories. When the difference				
	between the results for AV or VMA is not within ± 2.0 percent, the Department will investigate				
	and resolve the discrepancy according to Subsection 402.03.05.				
Subsection:	402.03.04 Dispute Resolution.				
Revision:	Change the subsection number to 402.03.05.				
	402.05 PAYMENT.				
Part:	Lot Pay Adjustment Schedule Compaction Option A Base and Binder Mixtures				
Table:	AC				
Revision:	Replace the Deviation from JMF(%) that corresponds to a Pay Value of 0.95 to ±0.6.				
	403.01 Description.				
Revision:	Replace the sentence three and four of the first paragraph with the following:				
	Provide a Superpave Plant Technologist (SPT) or Superpave Mix Design Technician (SMDT)				
	qualified by the Laboratories' Quality Acceptance program. Be available to address all Quality				
	Control concerns arising during work performed under section 403.				
Subsection:	403.02.10 Material Transfer Vehicle (MTV).				
Revision:	Replace the first sentence with the following:				
	In addition to the equipment specified above, provide a MTV with the following minimum				
	characteristics:				
L					

Contract ID: 162266 Page 61 of 105

Subsection:	403.03.03 Preparation of Mixture			
Part:	C) Mix Design Criteria			
Number:	2)			
Revision:	Revise part 2) to read as follows: Selection of Optimum AC. Normally, the Department will			
	approve the AC at an air-void content of 4.0 percent. The Engineer may assign an AC			
	corresponding to other air-void levels as deemed appropriate. Ensure the optimum AC is a			
	minimum of 5.2 percent by weight of the total mixture for all 0.5-inch nominal surface			
	mixtures and 5.5 percent by weight of the total mixture for all 0.38-inch nominal surface			
	mixtures.			
	412.02.09 Material Transfer Vehicle (MTV).			
Revision:	Replace the paragraph with the following:			
	Provide and utilize a MTV with the minimum characteristics outlined in section 403.02.10.			
	412.03.07 Placement and Compaction.			
Revision:	Replace the first paragraph with the following:			
	Use a MTV when placing SMA mixture in the driving lanes. The MTV is not required on			
	ramps and/or shoulders unless specified in the contract. When the Engineer determines the use			
	of the MTV is not practical for a portion of the project, the Engineer may waive its requirement			
	for that portion of pavement by a letter documenting the waiver.			
	412.04 MEASUREMENT.			
Revision:	Add the following subsection:			
	412.04.03. Material Transfer Vehicle (MTV). The Department will not measure the MTV for			
	payment and will consider its use incidental to the asphalt mixture.			
	501.03.19 Surface Tolerances and Testing Surface.			
Part:	B) Ride Quality.			
Revision:	Add the following to the end of the first paragraph:			
	The Department will specify if the ride quality requirements are Category A or Category B			
	when ride quality is specified in the Contract. Category B ride quality requirements shall apply			
	when the Department fails to classify which ride quality requirement will apply to the Contract.			
	501.03.05 Weather Limitations and Protection.			
Revision:	Replace the reference to Subsection 501.03.19 in Paragraph 5, with Subsection 501.03.20.			
	601.02.02 Cement			
Revision:	Replace the third sentence with the following: The Department will allow the use of Type			
	IP(≤20), Type IS(≤30), Type IL, Type II, and Type III when the Engineer approves.			
	601.02.02 Cement			
Revision:	Replace the fifth sentence with the following: If unsatisfactory test results are obtained using			
	Type IP(≤ 20), Type IS(≤ 30), Type IL, Type II, or Type III cement complete the work using			
	Type I cement.			

Contract ID: 162266 Page 62 of 105

Supplemental Specifications to the Standard Specifications for Road and Bridge Construction, 2012 Edition Effective with the April 29, 2016 Letting

			Effect	tive with t	ne Aprii 2	9, 2016 Let	iting
Subsection:	601.	03.02 Concret	e Producer Resp	onsibilities.			
Part:	E) Trip Tickets.						
Revision:	Replace the section with the following:						
					nformation	shown in the	e table below. Certify tha
		_					oproved mix design.
			nt manager or a			_	
		•	•			_	nation on the back of the
	-	ticket.	te inspector win	complete a	ii other nec	essury initori	nation on the ottek of the
	шр	ACKCt.					
				1	+		
		Contract Id:	Proj. Number:	Date:	County:		
		Truck No:	Producer Name:		_	ger Sample Id:	
		Qty(Yds ³):	Time Loaded (Nor	n Agitated Co	ncrete Only)	:	
		Begin Mixing 1	Time: A	AM PM	REV		
		Set Retarder U	sed	Yes	Туре	No	
		Water Reduce		Yes	Туре	No	
		Water Underru	unG	Gal/Yd³	To	tal Gallons	
		Design W/C:	Actual W/C:	Slump (inch	es)		
		Batch Weight	Information:				
		Material: D	escription: Desi	gn Qty: Rec	uired: Bate	<u>ched:</u> %Var:	%Moisture: Actual:
		Remarks:					
		*The data on t	his ticket is correc	t for the app	roved concre	ete mix design	*
		Signature:	:			Date:	
			KRMCA Level II Te	chnician or l	Plant Manag	ger	
Subsection:	601.	03.03 Proporti	oning and Requi	irements			
Part:		Concrete					
Revision:	/		NGREDIENT PI	ROPORTIC	NS AND I	REQUIREM	ENTS FOR VARIOUS
110 (151011)	Revise Table for INGREDIENT PROPORTIONS AND REQUIREMENTS FOR VARIOUS CLASSES OF CONCRETE as follows: Replace "M1 w/ Type 1 cement" with "M1 w/ Type 1						
	or blended hydraulic cement"						
Subsection:			ioning and Requi	irements			
Part:			Type IP, IS, and		ment or Mi	neral Admiyt	turec
Revision:		_					0), IS(\leq 30), and IL
Kevisioii.		* /	al Admixtures.	nows. Iviix	tures Osing	; Type IF (<u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	7), 13(\(\sigma\)), and 1L
Subsection:				irono onta			
		•	ioning and Requi			1 A Justica	
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures						
Number:	1)		1 0.11		ID(<00) IO	(((20) H. C.	
Revision:	+		ce to read as foll		IP(≤20), IS	(<u>≤</u> 30), IL Ce	ment.
Subsection:			ioning and Requi			1	
Part:		lixtures Using	Type IP, IS, and	d I(SM) Cei	ment or Mi	neral Admixt	tures
Number:	2)						
Revision:	Revi	se second sent	tence to read as f	follows: Th	e use of fly	ash, blast fu	urnace slag cement, or

micosilica in concrete is the Contractor's option.

	COL 02 02 D
	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Revision:	Revise the first sentence in the second paragraph to read as follows: When the ability to use
	blast furnace slag cement or microsilica has not been demonstrated have the concrete producer
	provide trial batches in accordance with Subsection 601.03.02 G) 1).
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	Revise first sentence to read as follows: Blast Furnace Slag Cement
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	Revise second sentence to read as follows: When added as a separate ingredient, use Grade
	120 or Grade 100 slag to reduce the quantity of cement, except do not use blast furnace slag
	cement to reduce the quantity of Type IS(\le 30) cement.
Subsection:	601.03.03 Proportioning and Requirements
Part:	C) Mixtures Using Type IP, IS, and I(SM) Cement or Mineral Admixtures
Number:	2)
Part:	b)
Revision:	In part b), replace all references to "GGBF slag" with "blast furnace slag cement".
	601.03.04 Classes and Primary Uses
Part:	H) Class M1
Revision:	Revise part H) to read as follows: High early strength for bridge joint repair and full or partial
ACVISION.	depth bridge deck patching. (Type 1 cement or blended hydraulic cement)
Subsection	603.03.06 Cofferdams.
Revision:	Replace the seventh sentence of paragraph one with the following:
ite vision.	Submit drawings that are stamped by a Professional Engineer licensed in the Commonwealth of
	Kentucky.
Subsection	605.03.04 Tack Welding.
Revision:	Insert the subsection and the following:
Kevision.	605.03.04 Tack Welding. The Department does not allow tack welding.
Subsection:	606.03.17 Special Requirements for Latex Concrete Overlays.
Part:	A) Existing Bridges and New Structures.
Number:	1) Prewetting and Grout-Bond Coat.
Revision:	Add the following sentence to the last paragraph: Do not apply a grout-bond coat on bridge
ACVISIOII.	decks prepared by hydrodemolition.
Subsection:	609.03 Construction.
Revision:	Replace Subsection 609.03.01 with the following:
Vealsion:	*
1	609.03.01 A) Swinging the Spans. Before placing concrete slabs on steel spans or precast
	concrete release the temporary erection supports under the bridge and swing the span free on its
1	supports.
1	609.03.01 B) Lift Loops. Cut all lift loops flush with the top of the precast beam once the
1	beam is placed in the final location and prior to placing steel reinforcement. At locations where
1	lift loops are cut, paint the top of the beam with galvanized or epoxy paint.
1	

G 1 41	(11.02.02 B			
	611.03.02 Precast Unit Construction.			
Revision:	Replace the first sentence of the subsection with the following:			
	Construct units according to ASTM C1577, replacing Table 1 (Design Requirements for			
	Precast Concrete Box Sections Under Earth, Dead and HL-93 Live Load Conditions)			
	with KY Table 1 (Precast Culvert KYHL-93 Design Table), and Section 605 with the			
	following exceptions and additions:			
Subsection:	613.03.01 Design.			
Number:	2)			
Revision:	Replace "AASHTO Standard Specifications for Highway Bridges" with "AASHTO LRFD			
	Bridge Design Specifications"			
Subsection:	615.06.02			
Revision:	Add the following sentence to the end of the subsection.			
	The ends of units shall be normal to walls and centerline except exposed edges shall be beveled			
	3/4 inch.			
Subsection:	615.06.03 Placement of Reinforcement in Precast 3-Sided Units.			
Revision:	Replace the reference of 6.6 in the section to 615.06.06.			
	615.06.04 Placement of Reinforcement for Precast Endwalls.			
Revision:	Replace the reference of 6.7 in the section to 615.06.07.			
	615.06.06 Laps, Welds, and Spacing for Precast 3-Sided Units.			
Revision:	Replace the subsection with the following:			
	Tension splices in the circumferential reinforcement shall be made by lapping. Laps may not be			
	tack welded together for assembly purposes. For smooth welded wire fabric, the overlap shall			
	meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and			
	AASHTO 2012 Bridge Design Guide Section 5.11.6.3. For deformed welded wire fabric, the			
	overlap shall meet the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1			
	and AASHTO 2012 Bridge Design Guide Section 5.11.6.2. The overlap of welded wire fabric			
	shall be measured between the outer most longitudinal wires of each fabric sheet. For			
	deformed billet-steel bars, the overlap shall meet the requirements of AASHTO 2012 Bridge			
	Design Guide Section 5.11.2.1. For splices other than tension splices, the overlap shall be a			
	minimum of 12" for welded wire fabric or deformed billet-steel bars. The spacing center to center of the circumferential wires in a wire fabric sheet shall be no less than 2 inches and no			
	more than 4 inches. The spacing center to center of the longitudinal wires shall not be more			
	than 8 inches. The spacing center to center of the longitudinal distribution steel for either line			
	of reinforcing in the top slab shall be not more than 16 inches.			
	615.06.07 Laps, Welds, and Spacing for Precast Endwalls.			
Revision:	Replace the subsection with the following:			
	Splices in the reinforcement shall be made by lapping. Laps may not be tack welded together			
	for assembly purposes. For smooth welded wire fabric, the overlap shall meet the requirements			
1	of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.2 and AASHTO 2012 Bridge Design			
1	Guide Section 5.11.6.3. For deformed welded wire fabric, the overlap shall meet the			
	requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.5.1 and AASHTO 2012			
	Bridge Design Guide Section 5.11.6.2. For deformed billet-steel bars, the overlap shall meet			
1	the requirements of AASHTO 2012 Bridge Design Guide Section 5.11.2.1. The spacing center-			
1	to-center of the wire fabric sheet shall not be less than 2 inches or more than 8 inches.			
<u> </u>	The second of the way that a second of the s			

Subsection:	615.08.01 Type of Test Specimen.					
Revision:	Replace the subsection with the following:					
	Start-up slump, air content, unit weight, and temperature tests will be performed each day on					
	the first batch of concrete. Acceptable start-up results are required for production of the first					
	unit. After the first unit has been established, random acceptance testing is performed daily for					
	each 50 yd ³ (or fraction thereof). In addition to the slump, air content, unit weight, and					
	temperature tests, a minimum of one set of cylinders shall be required each time plastic					
	* * *					
Subsections	property testing is performed. 515.08.02 Compression Testing.					
Revision:	Delete the second sentence.					
Subsection:	615.08.04 Acceptability of Core Tests.					
Revision:	Delete the entire subsection.					
	615.12 Inspection.					
Revision:	Add the following sentences to the end of the subsection: Units will arrive at jobsite with the					
	"Kentucky Oval" stamped on the unit which is an indication of acceptable inspection at the					
	production facility. Units shall be inspected upon arrival for any evidence of damage resulting					
	from transport to the jobsite.					
Subsection:	701.04.16 Deduction for Pipe Deflection.					
Revision:	Insert the following at the end of the paragraph:					
	The section length is determined by the length of the pipe between joints where the failure					
	occurred.					
Subsection:	716.02.02 Paint.					
Revision:	Replace sentence with the following: Conform to Section 821.					
Subsection:	716.03 CONSTRUCTION.					
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural					
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current					
	interims,					
Subsection:	716.03.02 Lighting Standard Installation.					
Revision:	Replace the paragraph with the following:					
	Locate poles to avoid trees, drainage, structures, etc. Regardless of the station & offset noted,					
	locate all poles/bases behind guardrail a minimum of 4 feet behind the face of the guardrail.					
	All poles shall be placed as close to stations and offsets as stated on Plans to provide proper					
	illumination. If any pole needs to be relocated from stations indicated, the Division of Traffic					
	Operations shall be contacted. When submitting brochures for suggested luminaires include					
	iso lux curves, IES type distribution, lamp lumens, and typical ballast factor used for each type					
	of luminaire. Submit the photometric data in a digital IES format to the Division of Traffic					
	Operations. Include with the submittal a point of contact and phone number to answer					
	technical questions about the luminaire.					
Subsection:	716.03.02 Lighting Standard Installation.					
Part:	A) Conventional Installation.					
Revision:	Replace the third sentence with the following: Orient the transformer base so the door is					
-10,1011	positioned on the side away from on-coming traffic.					
Subsection:	716.03.02 Lighting Standard Installation.					
Part:	A) Conventional Installation.					
Number:	1) Breakaway Installation and Requirements.					
Revision:	Replace the first sentence with the following: For breakaway supports, conform to Section 12					
Kevision:						
	of the AASHTO Standard Specifications for Structural Supports for Highway Signs,					
	Luminaires, and Traffic Signals, 2013-6th Edition with current interims.					

Subsection: 716.03.02 Lighting Standard Installation.

Part: B) High Mast Installation

Revision: Replace the first three sentences of the first paragraph with the following: Install each high

mast pole as noted on Plans. Install each high mast pole on a separate circuit and use luminaires

with light patterns as indicated. Orient luminaires as shown in Plans.

Subsection: 716.03.02 Lighting Standard Installation.

Part: B) High Mast Installation
Number: 2) Concrete Base Installation

Revision: Modification of Chart and succeeding paragraphs within this section:

Drilled Shaft Depth Data							
3:1 Ground		round	2:1 (Fround	1.5:1	Ground	
Level Ground		Sl	ope	Sl	ope	Slo	pe ⁽²⁾
Soil	Rock	Soil	Rock	Soil	Rock	Soil	Rock
17 ft	7 ft	19 ft	7 f t	20 ft	7 f t	(1)	7 ft

Steel Re	equirements		
Vert	ical Bars	Tie	s or Spiral
Size	Total	Size	Spacing or Pitch
#10	16	#4	12 inch

Note 1: Shaft length is 22 feet for cohesive soil only. For cohesionless soil, contact Geotechnical Branch for design.

Note 2: Do not construct high mast drilled shafts on ground slopes steeper than 1.5:1 without the approval of the Division of Traffic Operations.

If rock is encountered during drilling operations and confirmed by the Engineer to be of sound quality, the shaft is only required to be further advanced into the rock by the length of rock socket shown in the design table. The total length of the shaft need not be longer than that of soil alone. Both longitudinal rebar length and number of ties or spiral length shall be adjusted

If a shorter depth is desired for the drilled shaft, the Contractor shall provide, for the state's review and approval, a detailed column design with individual site specific soil and rock analysis performed and approved by a Professional Engineer licensed in the Commonwealth of Kentucky.

Spiral reinforcement may be substituted for ties. If spiral reinforcement is used, one and one-half closed coils shall be provided at the ends of each spiral unit. Subsurface conditions consisting of very soft clay or very loose saturated sand could result in soil parameters weaker than those assumed. Engineer shall consult with the Geotechnical Branch if such conditions

The bottom of the drilled hole shall be firm and thoroughly cleaned so no loose or compressible materials are present at the time of the concrete placement. If the drilled hole contains standing water, the concrete shall be placed using a tremie to displace water. Continuous concrete flow will be required to insure full displacement of any water.

The reinforcement and anchor bolts shall be adequately supported in the proper positions so no movement occurs during concrete placement. Welding of anchor bolts to the reinforcing cage is unacceptable, templates shall be used. Exposed portions of the foundation shall be formed to create a smooth finished surface. All forming shall be removed upon completion of foundation construction.

Subsection:	716.03.03 Trenching.					
Part:	A) Trenching of Conduit for Highmast Ducted Cables.					
Revision:	Add the following after the first sentence: If depths greater than 24 inches are necessary, obtain					
	the Engineer's approval and maintain the required conduit depths coming into the junction					
	boxes. No payment for additional junction boxes for greater depths will be allowed.					
Subsection:	716.03.03 Trenching.					
Part:	B) Trenching of Conduit for Non-Highmast Cables.					
Revision:	Add the following after the second sentence: If depths greater than 24 inches are necessary for					
	either situation listed previously, obtain the Engineer's approval and maintain the required					
	conduit depths coming into the junction boxes.					
Subsection:	716.03.04 Conduit Installation.					
Revision:	Replace the first two sentences of the paragraph with the following: Provide rigid steel					
	conduit encasement for all conductors except as specified in the Contract. Provide conduit that					
	is listed on the Department's List of Approved Materials.					
Subsection:	716.03.04 Conduit Installation.					
Part:	A) Conduit Requirements in Junction Boxes.					
Number:	1) Highmast Ducted Cable.					
Revision:	Replace the first two sentences with the following: Install conduit horizontally through the					
	junction box. Conduit shall be 4 inches from the bottom and 4 inches from the side of the					
G 1 41	junction box.					
	716.03.04 Conduit Installation.					
Revision:	Add the following to the Part to the Subsection: G) Bore and Jack. Construction The death of the library and a second an					
Subsection:	methods shall be in accordance with Subsections 706.03.02, paragraphs 1, 2 and 4.					
Revision:	716.03.08 Splicing. Replace the last sentence of the paragraph with the following: Ensure the splices are of the					
Kevision.	correct size for the wire being used.					
Subsection:	716.03.10 Junction Boxes.					
Revision:	Replace subsection title with the following: Electrical Junction Box and replace the last					
10,191011	sentence of the paragraph with the following: Any additional junction boxes shall be approved					
	by the Engineer.					
Subsection:	716.03.13 Temporary Lighting.					
Revision:	Change subsection heading to the following: 716.03.13 Temporary/Maintain Lighting.					
Subsection:	716.03.13 Temporary /Maintain Lighting.					
Revision:	Replace the entire section with the following:					
	The Contractor shall furnish and install all materials necessary to temporarily light the proposed					
	roadway to design standards in Subsection 716.03. The Contractor shall submit his proposed					
	design of temporary lighting to the Division of Traffic Operations for approval at least 30 days					
	before installation.					
	Maintain all lighting elements impacted within or outside the project limits until new lighting					
	elements are installed and a functional inspection has been performed on the new lighting					
	elements. The Contractor shall submit a proposed design for maintaining lighting to the					
	Division of Traffic Operations for approval at least 30 days before installation.					

Subsection	716.03.14 Remove Lighting.
Revision:	TOOLET TECHNOTO DIGHTING.
ACVISION.	Replace the section with the following: Remove all lighting equipment that is identified by the Engineer as no longer necessary including, but not limited to, the following: pole bases, poles, junction boxes, cabinets, and wood poles. Pole bases shall be removed a minimum of one foot below finished grade by chipping off or other method that is approved by the Engineer. Dispose of all removed concrete off right-of-way. Wood poles shall be removed a
	minimum of one foot below finished grade. Backfill holes with material approved by the Engineer. Conduit may be abandoned in the ground. All materials shall be removed from the project as directed by the Engineer. Transformers not owned by a utility shall be tested for PCB's and disposed of in accordance with state regulations.
Subsection: Revision:	716.03.15 Painting.
	Replace the first sentence with the following: Clean non-galvanized or damaged surfaces of exposed junction boxes, pull boxes, control panels, poles, and similar equipment, and apply one coat of an inhibiting paint and two coats of aluminum paint.
	716.04.01. Poles.
Revision:	Change the subsection heading to 716.04.01 Pole and replace the last sentence of the subsection with the following: The Department will not measure anchor bolts, washers, nuts, anchor bolt covers, ground lugs, and any associated hardware for payment and will consider
Cubactions	them incidental to this item of work.
Subsection: Revision:	716.04.02 High Mast Pole.
	Replace the second sentence with the following: The Department will not measure the lowering device, anchor bolts, head frame assembly, cables, winch unit, power cables, wiring, connectors, circuit breakers, grounding lugs, ground wire, ground rods, conduits, test plugs,, adjustment and calibration of the unit to provide the desired operation, and any associated hardware for payment and will consider them incidental to this item of work.
Subsection:	716.04.03 Bracket.
Revision:	Replace the second sentence with the following: The Department will not measure any associated hardware needed for attaching the bracket to the pole for payment and will consider them incidental to this item of work.
Subsection:	716.04.04 Pole Base.
Revision:	Change the subsection heading to 716.04.04 Pole Bases and delete the paragraph.
Subsection: Revision:	716.04.04 Pole Bases. Insert the following:
Revision:	A. Pole Base. The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction
	of the Engineer, and any associated hardware for payment and will consider them incidental to this item of work.
	B. Pole Base High Mast. The Department will measure the quantity in cubic yards furnished and installed. The Department will not measure excavation, concrete, conduits, fittings, ground rods, ground wires, ground lugs, reinforcing steel, restoring disturbed areas to the satisfaction of the Engineer, and any associated hardware for payment and will consider
	them incidental to this item of work.

Subsection:	716.04.05 Pole Base in Median Wall.				
Revision:	Replace the last sentence with the following: The Department will not measure conduit fittings, junction boxes, additional reinforcing steel, ground rods, ground wire, ground lug and aluminum cover plates (if specified) for payment, and will consider them incidental to the item of work.				
	716.04.06 Transformer Base.				
Revision:	Replace the last sentence with the following: The Department will not measure transformer door, ground lug, anchoring bolts, nuts, washers, and any associated hardware for payment and will consider them incidental to this item of work. The filling of any unused holes will also be considered incidental to this item of work.				
Subsection:	716.04.07 Pole with Secondary Equipment.				
Revision:	Replace the heading with the following: 716.04.07 Pole with Secondary Control Equipment.				
Subsection:	716.04.07 Pole with Secondary Control Equipment.				
Revision:	Replace the second and third sentence with the following: The Department will not measure mounting the cabinet to the pole, backfilling, restoration, any necessary hardware to anchor pole, electrical inspection fees, and required building fees involving utility secondary, and primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breaker, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The filling of unused holes will also be considered incidental to this item of work.				
Subsection: Revision:	716.04.08 Lighting Control Equipment. Replace the paragraph with the following:				
	The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure the concrete base, excavation, backfilling, restoration, any necessary anchors, electrical inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work. The Department will also not measure furnishing and installing electrical service conductors, specified conduits, meter base, transformer, service panel, fused cutout, fuses, lighting arrestors, photoelectrical control, circuit breakers, contactor, manual switch, ground rods, ground lugs, and ground wires for payment and will consider them incidental to this item of work. The Department will not measure the filling of any unused holes with and will consider them incidental to this item of work.				
Subsection:	716.04.09 Luminaire.				
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure lamps, starters, ballasts, drivers, surge protection, dimming modules, photo-control receptacle, specified shielding (if required), and any adjustments necessary to provide the desired lighting pattern for payment and will consider them incidental to this item of work.				
Subsection:	716.04.10 Fused Connector Kits.				
10 0110 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0					

Subsection:	716.04.10 Fuse Connector Kits.
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each
	individual unit furnished and installed. The Department will not measure fuses/lugs for
	payment and will consider them incidental to this item of work.
Subsection:	716.04.11 Conduit.
Revision:	Replace the second sentence with the following: The Department will not measure installation
	in ground or on structures, conduit fittings, test plugs, expansion joints with bonding straps,
	grounding lugs, drill anchors, clamps, and any additional hardware required for payment and
	will consider them incidental to this item of work.
Subsection:	716.04.12 Markers.
Revision:	Replace the section with the following: The Department will measure the quantity as each
	individual unit furnished and installed.
	716.04.13 Junction Box.
Revision:	Replace the subsection title with the following: Electrical Junction Box Type Various.
	716.04.13 Electrical Junction Box Type Various.
Revision:	Replace the section with the following: The Department will measure the quantity as each
	individual unit furnished and installed. The Department will not measure additional junction
	boxes for greater depths than those identified in Plans, #57 aggregate, backfilling, restoration of
	disturbed areas to the satisfaction of the Engineer, geotextile filter fabric, concrete, hot dipped
	galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for
	payment, and will consider them incidental to this item of work.
Subsection:	716.04.13 Junction Box.
Part:	A) Junction Electrical.
Revision:	Delete Part A.
Subsection:	716.04.14 Trenching and Backfilling.
Revision:	Replace the section with the following: The Department will measure the quantity in linear
	feet. The Department will not measure excavation, backfilling, underground utility warning
	tape (if required), and the restoration of disturbed areas to original condition for payment and
	will consider them incidental to this item of work.
Subsection:	716.04.15 Wire or Cable.
Revision:	Replace the section with the following: The Department will measure the quantity in linear feet
	furnished and installed. The Department will not measure installation within conduit, splice
	boots, and any other hardware required for installing cable for payment and will consider them
	incidental to this item of work.
	716.04.16 Ducted Cable.
Revision:	Replace the second sentence of the paragraph with the following: The Department will not
	measure installation within trench or conduit and any other necessary hardware for payment
	and will consider them incidental to this item of work.
	716.04.17 Temporary Lighting
Revision:	Rename the subsection as follows: 716.04.17 Temporary Lighting/Maintain Lighting.

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Subsection:	716 04 17 Temr	orary Lighting/Maintain Lighting.					
	Delete the paragraph and add the following parts:						
Tto Vision.		gighting. The Department will measure	are the quantity by lump sum. The				
	, .	not measure poles, luminaires, wire,					
	-	-	(in (if required), and any other necessary				
			at and will consider them incidental to this				
		tem of work. 3) Maintain Lighting. The Department will measure the quantity by lump sum. The					
	,		g elements and design (if required) for				
		ll consider them incidental to this iter					
	716.04.18 Remo		III OI WOIK.				
			partment will measure the quantity by lump				
		rtment will not measure backfilling a					
			ral or electrical component of the lighting				
	~ ~	the contract of the contract o	, junction boxes, cabinets, and wood poles				
	,	will consider them incidental to this					
	1 1 1 1 1 1 1						
Subsection:	716.04.19 Rem	ove Pole Base.					
Revision:	Delete Subsection	on.					
Subsection:	716.04.20 Bore	and Jack Conduit.					
Revision:	Renumber Subs	ection to 716.04.19 Bore and Jack Co	onduit.				
Subsection:	716.04.19 Bore	and Jack Conduit.					
Revision:	Replace the para	agraph with the following: The Depar	rtment will measure the quantity in linear				
	feet. This item shall include all work necessary for boring and installing conduit under an						
	existing roadwa	y.					
	716.05 PAYME						
Revision:	Revise the follow	wing under <u>Code</u> , <u>Pay Item</u> , and <u>Pay</u>	<u>Unit</u> with the following:				
	Code	Pay Item	Pay Unit				
	04700-04701	Pole(Various)Mtg Ht	Each				
	04710-04714	Pole(Various)Mtg Ht High Mast	Each				
	04810-04811	Electrical Junction Box (Various)	Each				
	20391NS835	Electrical Junction Box Type A	Each				
	20392NS835	Electrical Junction Box Type C	Each				
	04770-04773	Luminaire (Various)	Each				
	04780	Fuse Connector Kit	Each				
	20410ED	Maintain Lighting	Lump Sum				
	04941	Remove Pole Base	- Each				
	723.02.02 Paint.						
	Replace sentence with the following: Conform to Section 821.						
	723.03 CONST						
Revision:	Replace bullet 5) with the following: 5) AASHTO Standard Specifications for Structural						
	Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current						
	interims,						
		and Bases Installation.					
Revision:	Replace the title	with the following: 723.03.02 Pole	and Base Installation.				

Subsection:	723.03.02 Pole and Base Installation.			
Revision:	Replace the first paragraph with the following: Regardless of the station and offset noted,			
	locate all poles/bases behind the guardrail a minimum of four feet from the front face of the			
	guardrail to the front face of the pole base. Orient the handhole door away from traffic travel			
	path. If pole base is installed within a sidewalk the top of the pole base shall be the same grade			
	as the sidewalk.			
Subsection:	723.03.02 Poles and Bases Installation.			
Part:	A) Steel Strain and Mastarm Poles Installation			
Revision:	Replace the title of Part A) Steel Strain and Mast Arm Pole Installation.			
Subsection:	723.03.02 Pole and Base Installation.			
Part:	A) Steel Strain and Mast Arm Pole Installation.			
Revision:	Insert the following sentence at the beginning of the first paragraph: Install pole bases 4 to 6			
	inches above grade.			
Subsection:	723.03.02 Pole and Base Installation.			
Part:	A) Steel Strain and Mast Arm Pole Installation.			
	Replace the second paragraph with the following: For concrete base installation, see Subsection			
	716.03.02 B), 2), Paragraphs 2-6. Drilled shaft depth shall be based on the soil conditions			
	encountered during drilling and slope condition at the site. Refer to the design chart below:			
Subsection:	723.03.02 Pole and Base Installation.			
	B) Pedestal or Pedestal Post Installation.			
	Replace the second sentence with the following: If over 12 feet high the base shall have the			
	minimum depth and diameter as Subsection 716.03.02 (A), paragraph 2.			
	723.03.02 Poles and Bases Installation.			
Part:	B) Pedestal or Pedestal Post Installation.			
	Replace the fourth sentence of the paragraph with the following: For breakaway supports,			
	conform to Section 12 of the AASHTO Standard Specifications for Structural Supports for			
	Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.			
	723.03.03 Trenching.			
	Replace the first sentence with the following: See Subsection 716.03.03 (B).			
	723.03.03 Trenching.			
Part:	A) Under Roadway.			
Revision:	Delete Part A) Under Roadway.			
Subsection:	723.03.05 Conduit Requirements in Junction Boxes.			
Revision:	Delete the Subsection and replace with the following:			
	723.03.05 Fuse Connector Kits. See Subsection 716.03.09.			
Subsection:	723.03.06 Coupling Installation.			
Revision:	Delete the Subsection and replace with the following:			
	723.03.06 Painting. See Subsection 716.03.15.			
Subsection:	723.03.07 Bonding Requirements.			
Revision:	Delete the Subsection and replace with the following:			
	723.03.07 Electrical Junction Boxes. See Subsection 716.03.10.			

	section 716.03.15.		
Subsection: 723.03.09 Underground Warning Tape. Revision: Renumber Subsection to 723.03.08 Undergo	section 716.03.15.		
Revision: Renumber Subsection to 723.03.08 Undergo			
	Renumber Subsection to 723.03.08 Underground Warning Tape.		
Subsection: 723.03.10 Backfilling and Disturbed Areas	723.03.10 Backfilling and Disturbed Areas.		
Revision: Renumber Subsection to 723.03.09 Backfi	lling and Disturbed Areas.		
Subsection: 723.03.11 Wiring Installation.			
Revision: Renumber Subsection to 723.03.10 Wiring	Installation.		
Subsection: 723.03.10 Wiring Installation.			
	fth and sixth sentences: Provide an extra two feet of		
	duit in poles, pedestals, and junction boxes.		
The state of the s			
Subsection: 723.03.12 Loop Installation.			
Revision: Renumber Subsection to 723.03.11 Loop I	nstallation.		
Subsection: 723.03.11 Loop Installation.			
•	agraph with the following: Provide an extra two feet		
of loop wire and lead-in past the installed of	conduit in poles, pedestals, and junction boxes.		
Subsection: 723.03.13 Grounding Installation.			
Revision: Renumber Subsection to 723.03.12 Ground	ding Installation.		
Subsection: 723.03.12 Grounding Installation.			
Revision: Replace the reference to "Standard Detail S	Sheets" in the first sentence with "Plans".		
Subsection: 723.03.14 Splicing.			
Revision: Renumber Subsection to 723.03.13 Splicing	g.		
Subsection: 723.03.13 Splicing.			
Revision: Delete the reference to (IMSA 19-2) from	the 5th sentence of the paragraph.		
Subsection: 723.03.15 Painting.			
Revision: Delete Subsection.			
Subsection: 723.03.14 Splicing.			
Revision: Replace with new Subsection 723.03.14 Re	emove Signal Equipment.		
Subsection: 723.03.14 Remove Signal Equipment.			
	: Remove all traffic signal equipment that is		
S.	identified by the Engineer as no longer necessary including, but not limited to, the following:		
	pole bases, poles, junction boxes, cabinets, wood poles, and advance warning flashers. Pole		
	bases shall be removed a minimum of one foot below finished grade by chipping off or other		
	method that is approved by the Engineer. Dispose of all removed concrete off right-of-way.		
	Wood poles shall be removed a minimum of one foot below finished grade. Backfill holes with		
	material approved by the Engineer. Conduit may be abandoned in the ground. Contact the		
	district traffic Engineer to determine if any removed signal equipment needs to be returned to		
the district and to determine the location/ti	the district and to determine the location/time for such deliveries.		
G. 1			
Subsection: 723.05.16 Drawings.			
Revision: Renumber the Subsection to 723.03.15 Dra	awings.		

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Subsection:	723.03.15 Drawings.			
Revision:	Replace Subsection with the following: Before final inspection of the traffic control device, provide a complete set of reproducible as-built drawings that show the arrangement and locations of all equipment including: junction boxes, conduits, spare conduits, etc. Keep a daily record of all conduits placed in trenches, showing the distance from the pavement edge, the depth, and the length of runs, and indicate this information on the as-built drawings.			
Subsection:	723.03.17 Acceptance and Inspection Requirements.			
Revision:	Renumber Subsection to 723.03.16 Acceptance and Inspection Requirements.			
Subsection: Revision:				
Subsection	723.04.01 Conduit.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure conduit fittings, ground lugs, test plugs, expansion joints, and clamps for payment and will consider them incidental to this item of work.			
Subsection:	723.04.02 Junction Box.			
Revision:	Replace subsection title with the following: Electrical Junction Box Type Various.			
	23.04.02 Electrical Junction Box Type Various.			
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit furnished and installed. The Department will not measure additional junction boxes for greater depths than those identified in Plans, Aggregate (#57), backfilling, restoration of disturbed areas to the satisfaction of the Engineer, geotextile fabric, concrete, hot dipped galvanized cover, stainless steel screws, rubber gasket, and any associated hardware for payment and will consider them incidental to this item of work.			
Subsection:	723.04.03 Trenching and Backfilling.			
Revision:	Replace the second sentence with the following: The Department will not measure excavation, backfilling, underground utility warning tape, and the restoration of disturbed areas to original condition for payment and will consider them incidental to this item of work.			
Subsection:	723.04.04 Open Cut Roadway.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure concrete, reinforcing steel, and asphalt for payment and will consider them incidental to this item of work.			
Subsection:	723.04.05 Loop Wire.			
	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other necessary hardware for payment and will consider them incidental to this item of work.			
Subsection:	723.04.06 Cable.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure splice boots, cable rings, and any other hardware for payment and will consider them incidental to this item of work.			

	723.04.07 Pole-Wooden.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure excavation, backfilling, and restoring disturbed areas for payment and will consider			
	them incidental to this item of work.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure excavation, backfilling, and restoring disturbed areas for payment and will consider			
	them incidental to this item of work.			
	723.04.09 Mast Arm Pole.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure anchor bolts, arms, mounting brackets, and any other necessary hardware for payment			
	and will consider them incidental to this item of work.			
	723.04.10 Signal Pedestal.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure excavation, concrete, reinforcing steel, conduits, fittings, ground rods, ground wire,			
	ground lugs, backfilling, restoring disturbed areas, and other necessary hardware for payment			
	and will consider them incidental to this item of work.			
Subsection:	723.04.11 Post.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure excavation, backfilling, and restoring disturbed areas for payment and will consider			
	them incidental to this item of work.			
	723.04.12 Anchor.			
Revision:	Replace the second sentence of the subsection with the following: . The Department will not			
	measure down-guy, messenger, clamps, guy guard, or insulators, and possible installation in			
	various soil conditions for payment and will consider them incidental to this item of work.			
	723.04.13 Messenger.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure strand vises, bolts, washers, and other necessary hardware for payment and will			
	consider them incidental to this item of work.			
	723.04.14 Install Signal LED.			
Revision:	Revise subsection title to 723.04.14 Install Beacon Controller - 2 Circuit.			
Revision:	Replace the subsection with the following: The Department will measure the quantity as each			
	individual unit furnished and installed. The Department will not measure the controller			
	housing, mounting equipment, S5-1 school zone sign, time clock, nema flasher, ground rods,			
	ground wires, ground lugs, metering disconnect hardware, electrical inspection fees, and			
	required building fees involving utility secondary/primary service for payment and will			
	consider them incidental to this item of work.			

Subsection:	723.04.15 Loop Saw Slot and Fill.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure sawing, cleaning, filling induction loop saw slot, loop sealant, backer rod, drilling hole			
	for conduit, and grout for payment and will consider them incidental to this item of work.			
Subsection:				
Revision:	Replace the subsection with the following: The Department will measure the quantity as each			
	individual unit furnished, installed and connected to pole/pedestal. The Department will not			
	measure installing R10-3e signs, detector housing, and installing mounting hardware for sign			
	for payment and will consider them incidental to this item of work.			
Subsection:	723.04.17 Signal.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure furnishing and installing LED modules, retroreflective tape, back plates, and any other			
	hardware for payment and will consider them incidental to this item of work.			
	723.04.18 Signal Controller- Type 170.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure the concrete base, mounting the cabinet, connecting the signal and detectors,			
	excavation, backfilling, restoration, any necessary pole mounting hardware, electric service,			
	electrical inspection fees, and building fees involving secondary/primary service for payment			
	and will consider them incidental to this item of work. The Department will also not measure			
	furnishing and connecting the induction of loop amplifiers, pedestrian isolators, load switches,			
	model 400 modem card, electrical service conductors, conduits, anchors, meter base, fused			
	cutout, fuses, ground rods, ground wires, and ground lugs for payment and will consider them			
G 1	incidental to this item of work.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure the controller housing, mounting equipment, S5-1 school zone sign, time clock, nema			
	flasher, ground rods, ground wires, ground lugs, metering disconnect hardware, electrical			
	inspection fees, and required building fees involving utility secondary/primary service for payment and will consider them incidental to this item of work			
Subsection	payment and will consider them incidental to this item of work. 723.04.20 Install Signal Controller - Type 170.			
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each			
AC VISIOII.	individual unit installed. The Department will not measure the concrete base, mounting the			
	cabinet, connecting the signal and detectors, excavation, backfilling, restoration, any necessary			
	pole mounting hardware, electric service, electrical inspection fees, and required building fees			
	involving utility secondary/primary service for payment and will consider them incidental to			
	this item of work. The Department will also not measure connecting the induction loop			
	amplifiers, pedestrian isolators, load switches, model 400 modem card for payment and will			
	consider them incidental to this item of work. The Department will also not measure furnishing			
	and installing electrical service conductors, conduits, anchors, meter base, fused cutout, fuses,			
	ground rods, ground lugs, and ground wires for payment and will consider them incidental to			
	this item of work.			
Subsection:				
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure any necessary clamp assemblies for payment and will consider them incidental to this			
	item of work.			

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Subsection:	723.04.22 Remove Signal Equipment.		
Revision:	Replace the paragraph with the following: The Department will measure the quantity by lump sum. The Department will not measure backfilling and the disposal or transportation of equipment and materials associated with any structural or electrical component of the signal system including, but not limited to pole bases, poles, junction boxes, cabinets, and wood poles for payment and will consider them incidental to this item of work.		
Subsection:	723.04.23 Install Span/Pole Mounted Sign.		
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure the hanger or any other hardware necessary to install the sign for payment and will consider them incidental to this item of work.		
Subsection:	723.04.24 Install Pedestrian Head LED.		
Revision:	Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules and any other necessary hardware for payment and will consider them incidental to this item of work.		
Subsection:	723.04.25 Install Signal LED.		
Revision:	Insert the following sentence at the end of the paragraph: The Department will not measure the installation of LED modules, retroreflective tape, back plates, and any other necessary hardware for payment and will consider them incidental to this item of work.		
Revision:	Replace the subsection with the following: The Department will measure the quantity as each individual unit installed. The Department will not measure radio, modem, cable(s), antenna(s), router, repeater, and any other necessary hardware for payment and will consider them incidental to this item of work.		
	723.04.27 Video Camera.		
Revision:	Replace the second sentence of the subsection with the following: The Department will not measure video modules, mounting bracket, truss type arm, power cable, coaxial cable, and any other necessary hardware for payment and will consider them incidental to this item of work.		
Subsection:	723.04.28 Install Pedestrian Detector Audible.		
Revision:	Replace the second sentence with the following: The Department will not measure installing R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.		
Subsection:	723.04.29 Audible Pedestrian Detector.		
Revision:	Replace the second sentence with the following: The Department will not measure furnishing and installing the R10-3e sign, detector housing, and installing mounting hardware for payment and will consider them incidental to this item of work.		
	723.04.30 Bore and Jack Conduit.		
Revision:	Replace the paragraph with the following: The Department will measure the quantity in linea feet. This item shall include all work necessary for boring and installing conduit under an existing roadway.		
	Vinding Louding.		

Subsection:	723.04.31 Install Pedestrian Detector.			
Revision:	Replace the paragraph with the following: The Department will measure the quantity as each			
	individual unit installed and connected to pole/pedestal. The Department will not measure			
	installing R 10-3e sign, detector housing, and installing mounting hardware for payment and			
	will consider them incidental to this item of work.			
Subsection:				
Revision:	Replace the second sentence with the following: The Department will not measure installation			
210 (182011)	of arms, signal mounting brackets, anchor bolts, and any other necessary hardware for payment			
	and will consider them incidental to this item of work.			
Subsection:	723.04.33 Pedestal Post.			
Revision:	Replace the second sentence with the following: The Department will not measure excavation,			
Kevision.	backfilling, restoration, furnishing and installing concrete, reinforcing steel, anchor bolts,			
	conduit, fittings, ground rod, ground wire, ground lugs, or any other necessary hardware for			
	payment and will consider them incidental to this item of work.			
	payment and will consider them incidental to this item of work.			
	723.04.34 Span Mounted Sign.			
Revision:	Revise subsection title to 723.04.34 Span/Pole-Mounted Sign.			
Subsection:	723.04.34 Span/Pole-Mounted Sign.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure the hanger, sign, and any other necessary hardware for payment and will consider			
	them incidental to this item of work.			
Subsection:				
Revision:	Add the following sentence to the end of the subsection: The Department will not measure			
	removing, storage, reinstalling, and connecting radio, modem, cable(s), antenna(s), router,			
	repeater, and any other necessary hardware for payment and will consider them incidental to			
	this item of work.			
Subsection:				
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure excavation, backfilling, restoration, furnishing and installing reinforcing steel, anchor			
	bolts, conduits, ground rods, ground wires, and ground lugs for payment and will consider			
	them incidental to this item of work.			
Subsection:	723.04.37 Install Signal Pedestal.			
Revision:	Replace the second sentence of the subsection with the following: . The Department will not			
	measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing			
	steel, conduits, fittings, ground rod, ground wire, ground lugs, and any other necessary			
	hardware for payment and will consider them incidental to this item of work.			
Subsection:	723.04.38 Install Pedestal Post.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure excavation, backfilling, restoration, furnishing and installing concrete, reinforcing			
	steel, conduit, fittings, ground rod, ground wire, ground lugs, and any other necessary hardware			
	for payment and will consider them incidental to this item of work.			
Subsection:	723.04.39 Install Antenna.			
Revision:	Replace the second sentence of the subsection with the following: The Department will not			
	measure any other materials necessary to complete the installation for payment and will			
	consider them incidental to this item of work.			
	volidadi mom moradian to ano teni or work.			

Subsection:	723.05 PAYMENT.			
Revision:	Replace items 04810-04811, 20391NS835, 20392NS835,23052NN and add item number			
140 (191011)	24526ED under Code, Pay Item, and Pay Unit with the following:			
	2 1320LD under <u>Code</u> , <u>ray tem</u> , und <u>ray ome</u> with the following.			
	Code Pay Item Pay Unit			
	04810 Electrical Junction Box Each			
	04811 Electrical Junction Box Type B Each			
	20391NS835 Electrical Junction Box Type A Each			
	20392NS835 Electrical Junction Box Type C Each			
	23052NN Span/Pole-Mounted Sign Each			
	24526ED Install Beacon Controller 2 Cir Each			
Subsection:	801.01 REQUIREMENTS			
Revision:	Replace first sentence in paragraph one with the following: Provide Portland cement or			
110 (151011)	blended hydraulic cement from approved mills listed in the Department's List of Approved			
	Materials.			
Subsection:	801.01 REQUIREMENTS			
Number:	1)			
Revision:	Replace first sentence with the following: Type I, II, III, and IV <i>Portland cement</i> conforms to			
210 (101011)	ASTM C 150.			
Subsection:	801.01 REQUIREMENTS			
Number:	3)			
Revision:	Replace the first sentence with the following: Type IP (≤20), Portland-pozzolan cement,			
210 (101011)	conforms to ASTM C595, and the following additional requirements to Type IP (≤20).			
	comornia to 115111 Coso, una une fono vinig additional requirements to 13pe il (220).			
Subsection:	801.01 REQUIREMENTS			
Number:	3)			
Part:	b)			
Revision:	Delete part b)			
	801.01 REQUIREMENTS			
Number:	3)			
Part:	c)			
Revision:	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer			
	shall furnish to the Engineer reports showing the results of tests performed on the fly ash used			
	in the manufacture of the Type IP(≤20) cement shipped to the project.			
	in the manufacture of the Type if (\$20) cement shipped to the project.			
Subsection	201 01 DEOLUDEMENTS			
Number:	801.01 REQUIREMENTS 3)			
Part:	d)			
Revision:				
	Rename Part d) to Part c) 801.01 REQUIREMENTS			
Number:				
Part:	3) e)			
Revision:	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type			
14C (15IUII.				
	IP(≤20) cement throughout the project, unless the Engineer approved a change in brand in writing.			
Subsection:				
Number:	4)			
Revision:	Replace first sentence with the following: Type IS(≤30), Portland blast furnace slag cement,			
IXCVISIUII.				
	conforms to ASTM C 595 and the following requirements:			

Subsection:	801.01 REQUIREMENTS			
Number:	4)			
Part:	a)			
Revision:	Replace part a) with the following: Use Grade 100 or 120 blast furnace slag cement			
210 (101011)	conforming to the requirements of ASTM C 989.			
Subsection:	801.01 REQUIREMENTS			
Number:	4)			
Part:	b)			
Revision:	Delete part b)			
	801.01 REQUIREMENTS			
Number:	4)			
Part:	c)			
Revision:	Rename Part c) to Part b) and replace the text with the following: The cement manufacturer			
	shall furnish to the Engineer reports showing the results of the tests performed on the blast			
	furnace slag cement used in the manufacturing of the Type IS(≤30) shipped to the project.			
G 1	201 A1 DEOLUBE (ENTE			
	801.01 REQUIREMENTS			
Number:	4)			
Part:	d)			
	Rename Part d) to Part c)			
	801.01 REQUIREMENTS			
Number:	4)			
Part:				
Revision:	Rename Part e) to Part d) and replace the text with the following: Use only one brand of Type			
	IS(≤30) cement throughout the project, unless the Engineer approves otherwise.			
G I di	201 A1 DEOLUBEACENTO			
	801.01 REQUIREMENTS			
Number:	5) Livert and 5) and by Cillianian Toron II (5, 15). Postland livert and control of Course to ASTM.			
Revision:	Insert part 5) as the following: Type IL(5-15), Portland-limestone cement, conforms to ASTM			
C-l	C 595 and the following additional requirements:			
	801.01 REQUIREMENTS			
Number:	5)			
Part:	a) Insert part a) as the following. The compute manufacturer shall furnish to the Engineer reports			
Revision:	Insert part a) as the following: The cement manufacturer shall furnish to the Engineer reports			
	showing the results of test performed on the limestone used in the manufacture of the Type IL cement shipped to the project.			
Subsection:	801.01 REQUIREMENTS			
Number:				
Part:	5)			
Revision:	b) Insert part b) as the following: Use only one brand of Type IL cement throughout the project,			
IXC VISIUII.	unless the Engineer approves a brand change in writing.			
Subsection:	801.01 REQUIREMENTS			
Number:	5)			
Part:				
Revision:	c) Insert part c) as the following: The Type IL blended cement shall be an intimate and uniform			
ACVISIUII:	X / /			
Subsection:	blend produced by intergrinding of the Portland cement and limestone. 804.01.02 Crushed Sand.			
Revision:	Delete last sentence of the section.			
176.1121011;	Defend fast sentence of the section.			

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Subsection	804.01.06 Slag.			
Revision:	Add subsection and following sentence.			
ACVISION.				
	Provide blast furnace slag sand where permitted. The Department will allow steel slag sand only in asphalt surface applications.			
Subsoction	804.04 Asphalt Mixtures.			
Revision:	Replace the subsection with the following:			
Kevision:				
	Provide natural, crushed, conglomerate, or blast furnace slag sand, with the addition of fille necessary, to meet gradation requirements. The Department will allow any combination of			
	natural, crushed, conglomerate or blast furnace slag sand when the combination is achieved using cold feeds at the plant. The Engineer may allow other fine aggregates.			
<u> </u>				
	806.03.01 General Requirements.			
Revision:	Replace the second sentence of the paragraph with the following:			
	Additionally, the material must have a minimum solubility of 99.0 percent when tested			
	according to AASHTO T 44 and PG 76-22 must exhibit a minimum recovery of 60 percent,			
	with a J_{NR} (non-recoverable creep compliance) between 0.1 and 0.5, when tested according to			
	AASHTO TP 70.			
	806.03.01 General Requirements.			
Table:	PG Binder Requirements and Price Adjustment Schedule			
Revision:	Replace the Elastic Recovery, % (3) (AASHTO T301) and all corresponding values in the table			
	with the following:			
	Test Specification 100% Pay 90% Pay 80% Pay 70% Pay 50% Pay 50% Pay 100% Pa			
	MSCR recovery, % (3) 60 Min. ≥58 56 55 54 <53			
	(AASHTO TP 70)			
Subsection:	806.03.01 General Requirements.			
Table:	PG Binder Requirements and Price Adjustment Schedule			
Superscript	:(3)			
Revision:	Replace (3) with the following:			
	Perform testing at 64°C.			
Subsection:	808.07 Polypropylene Waterproofing Membrane.			
Revision:	Replace the paragraph and table with the following: Furnish a layered waterproofing			
	membrane. The layers will consist of an internal puncture resistant woven polypropylene fabr			
	sandwiched between two rubberized mastic layers. The mastic will have a heavy polyethylene			
	membrane attached on the top and the bottom mastic layer will be covered by a protective			
	release film.			
Subsection:	808.09 Acceptance.			
Revision:	Replace the reference to "KMIMS" in the second paragraph with SiteManager.			
	811.10.04 Properties of the Coated Bar.			
Part:	B) Flexibility of Coating.			
Revision:	Replace the second sentence of the paragraph with the following: Ensure that the coated bars			
_10,101011	are capable of being bent to 180 degrees (after rebound) over a mandrel, without any visible evidence of cracking the coating.			
Subsection:	813.04 Gray Iron Castings.			
Revision:	Replace the reference to "AASHTO M105" with "ASTM A48".			
Subsection:				
Number:	A) Bolts.			
Revision:	Delete first paragraph and "Hardness Number" Table. Replace with the following:			
are visivili.	A) Bolts. Conform to ASTM A325 (AASHTO M164) or ASTM A490 (AASHTO 253) as applicable.			
	Jappineavie.			

Cb	P14 04 02 Timber Cuerdreil Deste		
	814.04.02 Timber Guardrail Posts.		
	Third paragraph, replace the reference to "AWPA C14" with "AWPA U1, Section B, Paragraph 4.1".		
	814.04.02 Timber Guardrail Posts.		
	Replace the first sentence of the fourth paragraph with the following:		
	Use any of the species of wood for round or square posts covered under AWPA U1.		
	Fourth paragraph, replace the reference to "AWPA C2" with "AWPA U1, Section B, Paragraph 4.1".		
	814.04.02 Timber Guardrail Posts.		
	Delete the second sentence of the fourth paragraph.		
	814.05.02 Composite Plastic.		
	1) Add the following to the beginning of the first paragraph: Select composite offset blocks		
	conforming to this section and assure blocks are from a manufacturer included on the		
	Department's List of Approved Materials.		
	2) Delete the last paragraph of the subsection.		
	816.07.02 Wood Posts and Braces.		
	First paragraph, replace the reference to "AWPA C5" with "AWPA U1, Section B, Paragrap 4.1".		
	816.07.02 Wood Posts and Braces.		
	Delete the second sentence of the first paragraph.		
	818.07 Preservative Treatment.		
Kevision:	First paragraph, replace all references to "AWPA C14" with "AWPA U1, Section A".		
Subsection: 8	833.01.02 Sheeting Signs.		
	Replace the second sentence with the following: Provide a thickness of 125 mils if any single		
	edge dimension of the sign exceeds 3 feet.		
	834.14 Lighting Poles.		
	Replace the first sentence with the following: Lighting pole design shall be in accordance with		
	loading and allowable stress requirements of the AASHTO Standard Specifications for		
	Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with		
	current interims, with the exception of the following: The Cabinet will waive the requirement		
	stated in the first sentence of Section 5.14.6.2 – Reinforced Holes and Cutouts for high mast		
	poles (only). The minimum diameter at the base of the pole shall be 22 inches for high mast		
_	poles (only). The imminum diameter at the base of the pole shall be 22 menes for high mast		
Î			
	834.14.03 High Mast Poles.		
	Remove the second and fourth sentence from the first paragraph.		
	834.14.03 High Mast Poles.		
Revision: I	Replace the third paragraph with the following: Provide calculations and drawings that are		
120 11310110	stamped by a Professional Engineer licensed in the Commonwealth of Kentucky.		

Revision:

Subsection: 834.14.03 High Mast Poles.

595 grade A with a minimum yield strength of 55 KSI or ASTM A 572 with a minimum yield strength of 55 KSI. Use tubes that are round or 16 sided with a four inch corner radius, have a constant linear taper of .144 in/ft and contain only one longitudinal seam weld. Circumferential welded tube butt splices and laminated tubes are not permitted. Provide pole sections that are telescopically slip fit assembled in the field to facilitate inspection of interior surface welds and the protective coating. The minimum length of the telescopic slip splices shall be 1.5 times the inside diameter of the exposed end of the female section. Use longitudinal seam welds as commended in Section 5.15 of the AASHTO 2013 Specifications. The thickness of the transverse base shall not be less than 2 inches. Plates shall be integrally welded to the tubes with a telescopic welded joint or a full penetration groove weld with backup bar.

Replace paragraph six with the following: Provide a pole section that conforms to ASTM A

The handhole cover shall be removable from the handhole frame. One the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM A 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7-guage stainless steel to provide adjustability to insure weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube of the pole but needs to be at least 15 inches. Provide products that are hot-dip galvanized to the requirements of either ASTM A123 (fabricated products) or ASTM A 153 (hardware items).

Subsection:

834.16 ANCHOR BOLTS.

Revision:

Insert the following sentence at the beginning of the paragraph: The anchor bolt design shall follow the NCHRP Report 494 Section 2.4 and NCHRP 469 Appendix A Specifications.

Subsection:

834.17.01 Conventional.

Revision:

Add the following sentence after the second sentence: Provide a waterproof sticker mounted on the bottom of the housing that is legible from the ground and indicates the wattage of the fixture by providing the first two numbers of the wattage.

Subsection: | 834.21.01 Waterproof Enclosures.

Revision:

Replace the last five sentences in the second paragraph with the following sentences: Provide a cabinet door with a louvered air vent, filter-retaining brackets and an easy to clean metal filter. Provide a cabinet door that is keyed with a factory installed standard no. 2 corbin traffic control key. Provide a light fixture with switch and bulb. Use a 120-volt fixture and utilize a L.E.D. bulb (equivalent to 60 watts minimum). Fixture shall be situated at or near the top of the cabinet and illuminate the contents of the cabinet. Provide a 120 VAC GFI duplex receptacle in the enclosure with a separate 20 amp breaker.

G 1	027 07 T CC D 1		
	835.07 Traffic Poles.		
Revision:	Replace the first sentence of the first paragraph with the following: Pole diameter and wall thickness shall be calculated in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.		
Subsection:	835.07 Traffic Poles.		
Revision:	*Replace the first sentence of the fourth paragraph with the following: Ensure transverse plates		
	have a thickness ≥ 2 inches.		
	*Add the following sentence to the end of the fourth paragraph: The bottom pole diameter		
	shall not be less than 16.25 inches.		
Subsection:	835.07 Traffic Poles.		
Revision:	Replace the third sentence of the fifth paragraph with the following: For anchor bolt design,		
	pole forces shall be positioned in such a manner to maximize the force on any individual		
	anchor bolt regardless of the actual anchor bolt orientation with the pole.		
	835.07 Traffic Poles.		
Revision:	Replace the first and second sentence of the sixth paragraph with the following: The pole handhole shall be 25 inches by 6.5 inches. The handhole cover shall be removable from the handhole frame. On the frame side opposite the hinge, provide a mechanism on the handhole cover/frame to place the Department's standard padlock as specified in Section 834.25. The handhole frame shall have two stainless studs installed opposite the hinge to secure the handhole cover to the frame which includes providing stainless steel wing nuts and washers. The handhole cover shall be manufactured from 0.25 inch thick galvanized steel (ASTM 153) and have a neoprene rubber gasket that is permanently secured to the handhole frame to insure weather-tight protection. The hinge shall be manufactured from 7 gauge stainless steel to provide adjustability to insure a weather-tight fit for the cover. The minimum clear distance between the transverse plate and the bottom opening of the handhole shall not be less than the diameter of the bottom tube but needs to be at least 12 inches.		
Subsection: Revision:	835.07 Traffic Poles. *Replace the first sentence of the last paragraph with the following: Provide calculations and drawings that are stamped by a Professional Engineer licensed in the Commonwealth of Kentucky. *Replace the third sentence of the last paragraph with the following: All tables referenced in 835.07 are found in the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 2013-6th Edition with current interims.		
Subsection:	835.07.01 Steel Strain Poles.		
Revision:	Replace the second sentence of the second paragraph with the following:		
	The detailed analysis shall be certified by a Professional Engineer licensed in the		
	Commonwealth of Kentucky.		
	835.07.01 Steel Strain Poles.		
Revision:	Replace number 7. after the second paragraph with the following: 7. Fatigue calculations		
	should be shown for all fatigue related connections. Provide the corresponding detail, stress		
a.	category and example from table 11.9.3.1-1.		
	835.07.02 Mast Arm Poles.		
Revision:	Replace the second sentence of the fourth paragraph with the following: The detailed analysis		
	shall be certified by a Professional Engineer licensed in the Commonwealth of Kentucky.		

G 1	025.07.02.14	1	
	835.07.02 Mast Arm Poles.		
Revision:	Replace number 7) after the fourth paragraph with the following: 7) Fatigue calculations		
	should be shown for all fatigue related connections. Provide the corresponding detail, stress		
	category and example from table 11.9.3.1-1.		
Subsection:	835.07.03 Anchor Bolts		
Revision:		e end of the paragraph: There shall	
	used for the headed part of the anchor bolt when designed in this manner) provided per pole.		
	Templates shall be contained within a 26.5 inch diameter. All templates shall be fully		
	galvanized (ASTM A 1:	53).	
Subsection:	835.16.05 Optical Units		
Revision:	Replace the 3rd paragra	ph with the following:	
			website: http://www.intertek.com.
Subsection:	835.19.01 Pedestrian De		•
Revision:		ee with the following: Provide a fou	ir holed pole mounted aluminum
	•	is compatible with the pedestrian d	•
Subsection:	843.01.01 Geotextile Fa		
Table:		TEXTILES FOR SLOPE PROTECT	TION AND CHANNEL LINING
Revision:	Add the following to the		
110 (151011)	Property Property	Minimum Value ⁽¹⁾	Test Method
	CBR Puncture (lbs)	494	ASTM D6241
	` /		
	Permittivity (1/s)	0.7	ASTM D4491
Subsection:	843.01.01 Geotextile Fa	bric.	
Table:		TEXTILES FOR UNDERDRAINS	
Revision:	Add the following to the		
TTC VISIOII	Property	Minimum Value ⁽¹⁾	Test Method
	CBR Puncture (lbs)	210	ASTM D6241
	` ′	0.5	ASTM D0241 ASTM D4491
	Permittivity (1/s)	0.3	ASTW D4491
Subsection:	843.01.01 Geotextile Fa	bric.	
Table:		OTEXTILES FOR SUBGRADE OF	R EMBANKMENT
	STABILIZATION		
Revision:	Add the following to the	e chart:	
110 (151011)	Property Property	Minimum Value ⁽¹⁾	Test Method
	CBR Puncture (lbs)	370	ASTM D6241
	Permittivity (1/s)	0.05	ASTM D0241 ASTM D4491
	Permittivity (1/8)	0.03	ASTM D4491
Subsection:	843.01.01 Geotextile Fa	bric.	
Table:	TYPE IV FABRIC GEOTEXTILES FOR EMBANKMENT DRAINAGE BLANKETS AND		
1	PAVEMENT EDGE DRAINS		
Revision:	Add the following to the chart:		
IXC VISIUII.			Took M. 41 1
	Property CDD D (11)	Minimum Value ⁽¹⁾	Test Method
	CBR Puncture (lbs)	309	ASTM D6241
	Permittivity (1/s)	0.5	ASTM D4491

Subsection: 843.01.01 Geotextile Fabric.

Table: TYPE V HIGH STRENGTH GEOTEXTILE FABRIC

Revision: Make the following changes to the chart:

<u>Property</u> <u>Minimum Value⁽¹⁾</u> <u>Test Method</u>

CBR Puncture (lbs) 618 ASTM D6241

Apparent Opening Size U.S. #40⁽³⁾ ASTM D4751

(3) Maximum average roll value.

2016 KENTUCKY STANDARD DRAWINGS

DROP BOX INLET TYPE 1	
CURB BOX INLET TYPE A (DETAIL DRAWING)	RDB-270-09
CURB BOX INLET TYPE A (STEEL DRAWING)	RDB-271-05
CURB BOX INLET TYPE A (TOP PHASE TABLE)	
CURB BOX INLET TYPE A (DETAIL & BAR CHART FOR 8" LID)	
FOR ALL PIPE AND BOX CULVERT HEADWALLS (RDH SERIES) SEE HEADWALL SUPPLEM	IENT
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-001-10
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-003-05
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-004-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-005-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-007-04
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	
CULVERT, ENTRANCE & STORM SEWER PIPE TYPES & COVER HEIGHTS	
CULVERT & STORM SEWER PIPE TYPES & COVER HEIGHTS	RDI-012-03
PERFORATED PIPE TYPES AND COVER HEIGHTS	
PERFORATED PIPE FOR SUBGRADE DRAINAGE ON TWO-LANE (CLASS 2) AND MULTI-LA	NE ROADS
PERFORATED PIPE UNDERDRAINS (LONGITUDINAL AND TRANSVERSE)	RDP-006-04
PERFORATED PIPE DETAILS (SOLID ROCK)	RDP-007-04
PERFORATED PIPE HEADWALLS	RDP-010-09
JUNCTION BOX TYPE B	
CURVE WIDENING AND SUPERELEVATION TRANSITIONS	RGS-001-07
SUPERELEVATION FOR MULTILANE PAVEMENT	RGS-002-06
MISCELLANEOUS STANDARDS	RGX-001-06
DETECTABLE WARNINGS	
CURB AND GUTTER, CURBS AND VALLEY GUTTER	
APPROACHES, ENTRANCES, AND MAIL BOX TURNOUT	RPM-110-07
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK	RPM-150-08
CONCRETE ENTRANCE PAVEMENT AND SIDEWALK	RPM-152-08
SIDEWALK RAMPS	RPM-170-09
JOINTED PLAIN CONCRETE PAVEMENT FOR SHOULDERS AND MEDIANS	RPN-001-07
PAVEMENT TRANSITIONS AND JOINT DETAILS FOR JOINTED PLAIN CONCRETE PAVEME	ENT AT
BRIDGE ENDS	
JOINTED PLAIN CONCRETE PAVEMENT	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPN-020-04
CONCRETE PAVEMENT JOINT DETAILS	
EXPANSION AND CONTRACTION JOINT - LOAD TRANSFER ASSEMBLIES	RPS-020-14
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-030-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-031-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-032-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-033-07
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-034-07
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	RPS-036-06
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
CONCRETE PAVEMENT JOINTS - TYPES AND SPACING	
HOT - POURED ELASTIC JOINT SEALS FOR CONCRETE PAVEMENT	RPX-015-04
LANE CLOSURE TWO-LANE HIGHWAY	TTC-100-04
LANE CLOSURE USING TRAFFIC SIGNALS	TTC-110-03
SHOULDER CLOSURE	TTC-135-02

PAVEMENT CONDITION WARNING SIGNS	TTD-	-125-02
MOBILE OPERATION FOR PAINT STRIPING CASE I	TTS-	100-02
MOBILE OPERATION FOR PAINT STRIPING CASE II	TTS-	105-02

PART III

EMPLOYMENT, WAGE AND RECORD REQUIREMENTS

JOHNSON COUNTY 058GR16P094-FE01

TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

LABOR AND WAGE REQUIREMENTS APPLICABLE TO OTHER THAN FEDERAL-AID SYSTEM PROJECTS

- I. Application
- II. Nondiscrimination of Employees (KRS 344)
- III. Payment of Predetermined Minimum Wages
- IV. Statements and Payrolls

I. APPLICATION

- 1. These contract provisions shall apply to all work performed on the contract by the contractor with his own organization and with the assistance of workmen under his immediate superintendence and to all work performed on the contract by piecework, station work or by subcontract. The contractor's organization shall be construed to include only workmen employed and paid directly by the contractor and equipment owned or rented by him, with or without operators.
- 2. The contractor shall insert in each of his subcontracts all of the stipulations contained in these Required Provisions and such other stipulations as may be required.
- 3. A breach of any of the stipulations contained in these Required Provisions may be grounds for termination of the contract.

II. NONDISCRIMINATION OF EMPLOYEES

AN ACT OF THE KENTUCKY GENERAL ASSEMBLY TO PREVENT DISCRIMINATION IN EMPLOYMENT KRS CHAPTER 344 EFFECTIVE JUNE 16, 1972

The contract on this project, in accordance with KRS Chapter 344, provides that during the performance of this contract, the contractor agrees as follows:

- 1. The contractor shall not fail or refuse to hire, or shall not discharge any individual, or otherwise discriminate against an individual with respect to his compensation, terms, conditions, or privileges of employment, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy); or limit, segregate, or classify his employees in any way which would deprive or tend to deprive an individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, national origin, sex, disability or age (between forty and seventy). The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.
- 2. The contractor shall not print or publish or cause to be printed or published a notice or advertisement relating to employment by such an employer or membership in or any classification or referral for employment by the employment agency, indicating any preference, limitation, specification, or discrimination, based on race, color, religion, national origin, sex, disability or age (between forty and seventy), except that such notice or advertisement may indicate a preference, limitation, or specification based on religion, or national origin when religion, or national origin is a bona fide occupational qualification for employment.
- 3. If the contractor is in control of apprenticeship or other training or retraining, including on-the-job training programs, he shall not discriminate against an individual

because of his race, color, religion, national origin, sex, disability or age (between forty and seventy), in admission to, or employment in any program established to provide apprenticeship or other training.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment. The contractor will take such action with respect to any subcontract or purchase order as the administrating agency may direct as a means of enforcing such provisions, including sanctions for non-compliance.

III. PAYMENT OF PREDETERMINED MINIMUM WAGES

- 1. These special provisions are supplemented elsewhere in the contract by special provisions which set forth certain predetermined minimum wage rates. The contractor shall pay not less than those rates.
- 2. The minimum wage determination schedule shall be posted by the contractor, in a manner prescribed by the Department of Highways, at the site of the work in prominent places where it can be easily seen by the workers.

IV. STATEMENTS AND PAYROLLS

- 1. All contractors and subcontractors affected by the terms of KRS 337.505 to 337.550 shall keep full and accurate payroll records covering all disbursements of wages to their employees to whom they are required to pay not less than the prevailing rate of wages. Payrolls and basic records relating thereto will be maintained during the course of the work and preserved for a period of one (1) year from the date of completion of this contract.
- 2. The payroll records shall contain the name, address and social security number of each employee, his correct classification, rate of pay, daily and weekly number of hours worked, itemized deductions made and actual wages paid.
- 3. The contractor shall make his daily records available at the project site for inspection by the State Department of Highways contracting office or his authorized representative.

Periodic investigations shall be conducted as required to assure compliance with the labor provisions of the contract. Interrogation of employees and officials of the contractor shall be permitted during working hours.

Aggrieved workers, Highway Managers, Assistant District Engineers, Resident Engineers and Project Engineers shall report all complaints and violations to the Division of Contract Procurement.

The contractor shall be notified in writing of apparent violations. The contractor may correct the reported violations and notify the Department of Highways of the action taken or may request an informal hearing. The request for hearing shall be in writing within ten (10) days after receipt of the notice of the reported violation. The contractor may submit

records and information which will aid in determining the true facts relating to the reported violations.

Any person or organization aggrieved by the action taken or the findings established as a result of an informal hearing by the Division of Contract Procurement may request a formal hearing.

- 4. The wages of labor shall be paid in legal tender of the United States, except that this condition will be considered satisfied if payment is made by a negotiable check, on a solvent bank, which may be cashed readily by the employee in the local community for the full amount, without discount or collection charges of any kind. Where checks are used for payments, the contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.
- 5. No fee of any kind shall be asked or accepted by the contractor or any of his agents from any person as a condition of employment on the project.
- 6. No laborers shall be charged for any tools used in performing their respective duties except for reasonably avoidable loss or damage thereto.
- 7. Every employee on the work covered by this contract shall be permitted to lodge, board, and trade where and with whom he elects and neither the contractor nor his agents, nor his employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board or trade at a particular place or with a particular person.
- 8. Every employee on the project covered by this contract shall be an employee of either the prime contractor or an approved subcontractor.
- 9. No charge shall be made for any transportation furnished by the contractor or his agents to any person employed on the work.
- 10. No individual shall be employed as a laborer or mechanic on this contract except on a wage basis, but this shall not be construed to prohibit the rental of teams, trucks or other equipment from individuals.

No Covered employee may be employed on the work except in accordance with the classification set forth in the schedule mentioned above; provided, however, that in the event additional classifications are required, application shall be made by the contractor to the Department of Highways and (1) the Department shall request appropriate classifications and rates from the proper agency, or (2) if there is urgent need for additional classification to avoid undue delay in the work, the contractor may employ such workmen at rates deemed comparable to rates established for similar classifications provided he has made written application through the Department of Highways, addressed to the proper agency, for the supplemental rates. The contractor shall retroactively adjust, upon receipt of the supplemental rates schedule, the wages of any employee paid less than the established rate and may adjust the wages of any employee overpaid.

- 11. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any work-week in which he is employed on such work, to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such work-week. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. This agreement shall be in writing and shall be executed prior to the employee working in excess of eight (8) hours, but not more than ten (10) hours, in any one (1) calendar day.
- 12. Payments to the contractor may be suspended or withheld due to failure of the contractor to pay any laborer or

mechanic employed or working on the site of the work, all or part of the wages required under the terms of the contract. The Department may suspend or withhold payments only after the contractor has been given written notice of the alleged violation and the contractor has failed to comply with the wage determination of the Department of Highways.

13. Contractors and subcontractors shall comply with the sections of Kentucky Revised Statutes, Chapter 337 relating to contracts for Public Works.

Revised 2-16-95

JOHNSON COUNTY 058GR16P094-FE01

EXECUTIVE BRANCH CODE OF ETHICS

In the 1992 regular legislative session, the General Assembly passed and Governor Brereton Jones signed Senate Bill 63 (codified as KRS 11A), the Executive Branch Code of Ethics, which states, in part:

KRS 11A.040 (6) provides:

No present or former public servant shall, within six (6) months of following termination of his office or employment, accept employment, compensation or other economic benefit from any person or business that contracts or does business with the state in matters in which he was directly involved during his tenure. This provision shall not prohibit an individual from returning to the same business, firm, occupation, or profession in which he was involved prior to taking office or beginning his term of employment, provided that, for a period of six (6) months, he personally refrains from working on any matter in which he was directly involved in state government. This subsection shall not prohibit the performance of ministerial functions, including, but not limited to, filing tax returns, filing applications for permits or licenses, or filing incorporation papers.

KRS 11A.040 (8) states:

A former public servant shall not represent a person in a matter before a state agency in which the former public servant was directly involved, for a period of one (1) year after the latter of:

- a) The date of leaving office or termination of employment; or
- b) The date the term of office expires to which the public servant was elected.

This law is intended to promote public confidence in the integrity of state government and to declare as public policy the idea that state employees should view their work as a public trust and not as a way to obtain private benefits.

If you have worked for the executive branch of state government within the past six months, you may be subject to the law's prohibitions. The law's applicability may be different if you hold elected office or are contemplating representation of another before a state agency.

Also, if you are affiliated with a firm which does business with the state and which employs former state executive-branch employees, you should be aware that the law may apply to them.

In case of doubt, the law permits you to request an advisory opinion from the Executive Branch Ethics Commission, Room 136, Capitol Building, 700 Capitol Avenue, Frankfort, Kentucky 40601; telephone (502) 564-7954.

Kentucky Equal Employment Opportunity Act of 1978

The requirements of the Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) shall apply to this Contract. The apparent low Bidder will be required to submit EEO forms to the Division of Construction Procurement, which will then forward to the Finance and Administration Cabinet for review and approval. No award will become effective until all forms are submitted and EEO/CC has certified compliance. The required EEO forms are as follows:

- EEO-1: Employer Information Report
- Affidavit of Intent to Comply
- Employee Data Sheet
- Subcontractor Report

These forms are available on the Finance and Administration's web page under *Vendor Information*, *Standard Attachments and General Terms* at the following address: https://www.eProcurement.ky.gov.

Bidders currently certified as being in compliance by the Finance and Administration Cabinet may submit a copy of their approval letter in lieu of the referenced EEO forms.

For questions or assistance please contact the Finance and Administration Cabinet by email at **finance.contractcompliance@ky.gov** or by phone at 502-564-2874.

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KENTUCKY LABOR CABINET PREVAILING WAGE DETERMINATION CURRENT REVISION HIGHWAY CONSTRUCTION LOCALITY NO. II

Determination No. CR-16-II-HWY

Project No. Highway

Date of Determination: July 1, 2016

This schedule of the prevailing rate of wages for Locality No. II including the counties of ADAIR, BARREN, BELL, BREATHITT, CASEY, CLAY, CLINTON, CUMBERLAND, ESTILL, FLOYD, GARRARD, GREEN, HARLAN, HART, JACKSON, JOHNSON, KNOTT, KNOX, LAUREL, LAWRENCE, LEE, LESLIE, LETCHER, LINCOLN, MCCREARY, MAGOFFIN, MARTIN, MENIFEE, METCALFE, MONROE, MORGAN, OWSLEY, PERRY, PIKE, POWELL, PULASKI, ROCKCASTLE, RUSSELL, TAYLOR, WAYNE, WHITLEY, and WOLFE has been determined in accordance with the provisions of KRS 337.505 to 337.550. This determination shall be referred to as Prevailing Wage Determination No. CR-15-II-HWY.

The following schedule of rates is to be used for highway construction projects advertised or awarded by the <u>Kentucky Transportation Cabinet</u>. This includes any contracts for the relocation of any utilities or other incidental construction projects advertised or awarded by public authorities as a result of the highway construction project.

Apprentices or trainees shall be permitted to work in accordance with Administrative Regulations. Copies of these regulations will be furnished upon request to any interested person.

Overtime is to be computed at not less than one and one-half (1 1/2) times the indicated BASE RATE for all hours worked in excess of eight (8) hours per day, or in excess of forty (40) hours per week. However, KRS 337.540 permits an employee and employer to agree, in writing, that the employee will be compensated at a straight time base rate for hours worked in excess of eight (8) hours in any one calendar day, but not more than ten (10) hours worked in any one calendar day, if such written agreement is prior to the over eight (8) hours in a calendar day actually being worked, or where provided for in a collective bargaining agreement. The fringe benefit rate is to be paid for each hour worked at a straight time rate for all hours worked. Fringe benefit amounts are applicable for all hours worked except when otherwise noted. Welders will receive rate for craft in which welding is incidental.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

Ervin Dimeny, Commissioner

Department of Workplace Standards

CLASSIFICATIONS	RATE AND FRINGE BENEFITS
BOILERMAKERS:	BASE RATE \$24.65 FRINGE BENEFIT 12.94
BRICKLAYERS: Bricklayers:	BASE RATE \$22.90 FRINGE BENEFITS
8.50 Stone Mason:	BASE RATE \$21.50 FRINGE BENEFITS 8.50
CARPENTERS: Carpenters:	BASE RATE \$24.90 FRINGE BENEFITS 14.50
Piledrivers:	BASE RATE \$24.55 FRINGE BENEFITS 14.50
 CEMENT MASONS:	BASE RATE \$21.25 FRINGE BENEFITS 8.50
ELECTRICIANS:	*BASE RATE \$29.36 FRINGE BENEFITS 10.55
*When workmen are required to work from bosum chairs, to radio and T.V. towers, structural steel (open, unprotected, unhazardous locations where workmen are subject to a direct trucks up to 75 feet: Add 25% to workman's base rate for 5 base rate for over 75 feet.	nfloored raw steel), and bridges or similar fall, except where using JLG's and bucket
LINEMAN:	*BASE RATE \$30.09 FRINGE BENEFITS 10.94
EQUIPMENT OPERATOR:	*BASE RATE \$26.90 FRINGE BENEFITS 10.31
	11111 (02 221 (2111) 10101
GROUNDSMAN:	*BASE RATE \$17.79 FRINGE BENEFITS 8.51

 JOHNSON COUNTY
 Contract ID: 162266

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<u>CLASSIFICATIONS</u>

RATE AND FRINGE

BENEFITS

LABORERS:

GROUP 1: Aging and curing of concrete (any mode or method), asbestos abatement worker, asphalt plant laborers, asphalt laborers; batch truck dumpers; carpenter tenders, cement mason tenders, cleaning of machines, concrete laborers, demolition laborers, dredging laborers, drill helper, environmental laborer - nuclear, radiation, toxic and hazardous waste – Level D, flagmen, grade checkers, all hand digging and hand back filling, highway marker placers, landscaping laborers, mesh handlers and placers, puddler, railroad laborers, rip-rap and grouters, right of way laborers, sign, guard rail and fence installers (all types), signalmen, sound barrier installer, storm and sanitary sewer laborers, swampers, truck spotters and dumpers, wrecking of concrete forms, general cleanup, tending of setting precast concrete products, applying sealer, epoxies, coating, curing compounds, cure and seal products and preparation on all services of concrete wall expansion materials:

BASE RATE \$22.75 FRINGE BENEFITS 12.00

GROUP 2: Batter board men (sanitary and storm sewer), brickmason tenders, mortar mixer operator, scaffold builders, burner and welder, bushammers, chain saw operator, concrete saw operators, deckhand scow man, dry cement handlers, environmental laborers – nuclear, radiation, toxic and hazardous waste – Level C, forklift operators for masonry, form setters, green concrete cutting, hand operated grouter and grinder machine operator, jack hammers, lead paint abatement, pavement breakers, paving joint machine, pipe layers – laser operators (non-metallic), plastic pipe fusion, power driven Georgia buggy and wheel barrow, power post hole diggers, precast manhole setters, walk-behind tampers, walk-behind trenchers, sand blasters, concrete chippers, surface grinders, vibrator operators, wagon drillers:

BASE RATE \$23.00 FRINGE BENEFITS 12.00

GROUP 3: Air track driller (all types), asphalt luteman and rakersm gunnite nozzleman, gunnite operators and mixers, grout pump operator, powderman and blaster, side rail setters, rail paved ditches, screw operators, tunnel laborers (free air), and water blasters, remote control compactors, air lifting, dewatering, water pumps and asphalt sealer applicator:

BASE RATE \$23.05 FRINGE BENEFITS 12.00

GROUP 4: Caisson workers (free air), cement finishers, environmental laborer – nuclear, radiation, toxic and hazardous waste – Level A and B, miners and drillers (free air), tunnel blasters, and tunnel mockers (free air), directional and horizontal boring, air track drillers (all types), powder man and blasters, troxler and concrete tester if laborer is utilized, concrete vibrator, tv inspection, cleaning tech, GPS tech if performed by a laborer:

BASE RATE \$23.65 FRINGE BENEFITS 12.00

JOHNSON COUNTY

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BENEFITS

CLASSIFICATIONS

OPERATING ENGINEERS:

CLASS A-1:

NCCCO or OECP Certified or US Coast Guard approved Boat Pilot License; Crane, dragline, hoist (1 drum when used for stack or chimney construction or repair), hoisting engineer (2 or more drums), orangepeel, overhead crane, piledriver, truck crane, tower crane, hydraulic crane, cableway, carry deck, cherry picker, clamshell, derrick, derrick boat, hydraulic boom truck, licensed boat pilot, rough terrain crane, tower cranes (French, German & other types), truck crane:

> **BASE RATE** \$32.21 FRINGE BENEFITS 15.00

AND

FRINGE

RATE

CLASS A:

A-Frame winch truck, auto patrol, backfiller, batcher plant, bituminous paver, bituminous transfer machine, all types of boom cats, bulldozer, cableway, carry-all scoop, carry deck crane, central compressor plant operator, cherry picker, clamshell, concrete mixer (21 cu. Ft. or over), concrete paver, truck mounted concrete pump, core drills, crane, crusher plant, derrick, derrick boat, ditching and trenching machine, dragline, dredge operator, dredge engineer, earth movers, elevating grader and all types of loaders, gradeall gurries, heavy equipment robotics operator/mechanic, high lift, hoe type machine, hoist (2 drums or more), hoisting engine, (2 or more drums), horizontal directional drill, hydraulic boom truck, hydrocrane, hyster, KeCal loader, Letourneau, locomotive, mechanic, mechanically operated laser screed, mechanic welder, mucking machine, motor scraper, orange-peel bucket, overhead crane, piledriver, power blade, pumperete, push dozer, rock spreader attached to equipment, all rotary drills, roller (bituminous), rough terrain crane, scarifier, scoopmobile, shovel, side boom, subgrader, tailboom, telescoping type forklift, tow or push boat, tower cranes (French, German and other types), tractor shovel and truck crane, tunnel mining machines including moles, shields or similar types of tunnel mining equipment, self-propelled modular transporter, hydro excavator, micro pile machine, remote controlled demolition equipment, milling machine, track hoe, rubber tire back hoe, reclaimer/stabilizer:

> **BASE RATE** \$31.05 FRINGE BENEFITS 15.00

Group B:

All air compressors (over 900 cu. ft. per min), bituminous mixer, boom type tamping machine, bull float, concrete mixer (under 21 cu ft), dredge engineer, electric vibrator compactor/self-propelled compactor, elevator (on drum or buck hoist), finish machine, firemen, flexplane, forklift (regardless of lift height), form grader, hoist (one drum), joint sealing machine, mechanic helper, outboard motor boat, power sweeper (riding type), roller (rock), ross carrier, skid mounted or trailer mounted concrete pumps, skid steer machine with all attachments, switchman or b5rakeman, throttle valve man, tract air and road widening trencher, tractor (50 hp and over), truck crane oiler, tugger, welding machine, well points, whirley oiler, water pull/water pull/water truck when used for compacting:

> **BASE RATE** \$28.28 FRINGE BENEFITS 15.00

Group B2:

Greaser on grease facilities servicing heavy equipment, all off road material handling equipment, including articulating dump trucks:

> **BASE RATE** \$28.71 FRINGE BENEFITS 15.00

CLASSIFICATIONS RATE AND **FRINGE**

BENEFITS

OPERATING ENGINEERS (CONTINUED):

Group C:

SHEET METAL:

Bituminous distributor, cement gun, conveyor, mud jack, paving joint machine, pump, tamping machine, tractors (under 50 H.P.), vibrator, oiler, air compressors (under 200 cu. ft. per min. capacity), concrete saw,

burlap and curing machine, hydro seeder, power form handling equipment, deckhand oiler, hydraulic post driver, caisson drill and core drill helper (track or skid mounted), concrete saw, paving joint machine, roller (earth), steermen, tractors (under 50 hp):

> **BASE RATE** \$27.97 FRINGE BENEFITS 15.00

Operators on cranes with booms 150 ft. and over including jib shall receive \$1.00 above Class A-1 or Class A rate; 250 ft. and over including jib shall receive \$1.00 above Class A-1 or Class A rate. All cranes with the length of the boom in combination with length of the piling leads equals or exceeds 150 ft. shall receive \$1.00 above Class A-1 or Class A.

PAINTERS:		
Brush & Roller:		\$24.74
	FRINGE BENEFITS	9.54
Spray:	BASE RATE	\$25.24
	FRINGE BENEFITS	9.54
Sand Blasting & Hopper Tender:	BASE RATE	
\$24.49	FRINGE BENEFITS	9.54
Bridges (when highest point of clearance is 60 feet or more):	BASE RATE	\$24.99
	FRINGE BENEFITS	9.54
Sand Blasting, Hopper Tender (bridges when highest point of cleara	nce is 60 feet or more):	
		\$25.49
	FRINGE BENEFITS	9.54
Bridge/Equipment Tender and or Containment Builder:	BASE RATE	\$21.33
	FRINGE BENEFITS	9.54
Bridge Quality Control:	BASE RATE	\$16.45
	FRINGE BENEFITS	9.54
Lead Abatement:	BASE RATE	\$24.99
	FRINGE BENEFITS	9.54
PLUMBERS:	BASE RATE FRINGE BENEFITS	\$22.52 7.80

BASE RATE

\$20.40

FRINGE BENEFITS 7.80

FRINGE BENEFITS 14.50

CLASSIFICATIONS BENEFITS	RATE	AND	FRINGE
TRUCK DRIVERS:			
Truck helper and warehouseman:	BASE RA	TE BENEFITS	\$23.20 14.50
Driver, winch truck and A-Frame when used in transporting materials:	BASE RA	TE BENEFITS	\$23.30 14.50
Driver, (semi-trailer or pole trailer), driver (dump truck, tandem axle), driver of distributor:	BASE RA	TE BENEFITS	\$23.40 14.50
Driver on mixer trucks (all types):	BASE RA	TE BENEFITS	\$23.45 14.50
Truck mechanic:	BASE RA	TE BENEFITS	\$23.50 14.50
Driver (3 tons and under), tire changer and truck mechanic helper:	BASE RA	TE BENEFITS	\$23.53 14.50
Driver on pavement breakers:	BASE RA FRINGE E	TE BENEFITS	\$23.55 14.50
Driver (over 3 tons), driver (truck mounted rotary drill):	BASE RA	TE BENEFITS	\$23.74 14.50
Driver, Euclid and other heavy earth moving equipment and Low Boy:	BASE RA	TE BENEFITS	\$24.31 14.50
Greaser on greasing facilities:	BASE RA	TE	\$24.40

END OF DOCUMENT

Kentucky Determination No. CR-16-II-HWY dated July 1, 2016

Fringe benefit amounts are applicable for all hours worked except when otherwise noted.

No laborer, workman or mechanic shall be paid at a rate less than that of the General Laborer except those classified as bona fide apprentices registered with the Kentucky State Apprenticeship Supervisor unless otherwise specified in this schedule of wage rates.

These rates are listed pursuant to the Kentucky Determination No. CR-16-II-HWY dated July 1, 2016. Apprentices or trainees shall be permitted to work as such subject to Administrative Regulations adopted by the Commissioner of Workplace Standards. Copies of these regulations will be furnished upon request from any interested person.

Before using apprentices on the job the contractor shall present to the Contracting Officer written evidence of registration of such employees in a program of a State apprenticeship and training agency approved and recognized by the U. S. Bureau of Apprenticeship and Training. In the absence of such a State agency, the contractor shall submit evidence of approval and registration by the U. S. Bureau of Apprenticeship and Training.

The contract or shall submit to the Contracting Officer, written evidence of the established apprenticeship-journeyman ratios and wage rates in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

TO: EMPLOYERS/EMPLOYEES

PREVAILING WAGE SCHEDULE:

The wages indicated on this wage schedule are the least permitted to be paid for the occupations indicated. When an employee works in more than one classification, the employer must record the numbers of hours worked in each classification at the prescribed hourly base rate.

OVERTIME:

Overtime is to be paid after an employee works eight (8) hours a day or forty (40) hours a week, whichever gives the employee the greater wage. At least time and one-half the base rate is required for all overtime. A laborer, workman or mechanic and an employer may enter into a written agreement or a collective bargaining agreement to work more than eight (8) hours a calendar day but not more than ten (10) hours a calendar day for the straight time hourly rate. Wage violations or questions should be directed to the designated Engineer or to the undersigned.

Director Division of Construction Procurement Frankfort, Kentucky 40622 502-564-3500

PART IV

INSURANCE

INSURANCE

The Contractor shall procure and maintain the following insurance in addition to the insurance required by law:

- 1) Commercial General Liability-Occurrence form not less than \$2,000,000 General aggregate, \$2,000,000 Products & Completed Aggregate, \$1,000,000 Personal & Advertising, \$1,000,000 each occurrence.
- 2) Automobile Liability- \$1,000,000 per accident
- 3) Employers Liability:
 - a) \$100,000 Each Accident Bodily Injury
 - b) \$500,000 Policy limit Bodily Injury by Disease
 - c) \$100,000 Each Employee Bodily Injury by Disease
- 4) The insurance required above must be evidenced by a Certificate of Insurance and this Certificate of Insurance must contain one of the following statements:
 - a) "policy contains no deductible clauses."
 - b) "policy contains _____ (amount) deductible property damage clause but company will pay claim and collect the deductible from the insured."
- 5) KENTUCKY WORKMEN'S COMPENSATION INSURANCE. The contractor shall furnish evidence of coverage of all his employees or give evidence of self-insurance by submitting a copy of a certificate issued by the Workmen's Compensation Board.

The cost of insurance is incidental to all contract items. All subcontractors must meet the same minimum insurance requirements.

PART V

BID ITEMS

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PROPOSAL BID ITEMS

Report Date 9/9/16

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	335.00	TON		\$	
0020	00071		CRUSHED AGGREGATE SIZE NO 57	105.00	TON		\$	
0030	00078		CRUSHED AGGREGATE SIZE NO 2	2.00	TON		\$	
0040	01830		STANDARD INTEGRAL CURB	952.00	LF		\$	
0050	01902		REMOVE INTEGRAL CURB	501.00	LF		\$	
0060	02014		BARRICADE-TYPE III	6.00	EACH		\$	
0070	02058		REMOVE PCC PAVEMENT	2,676.00	SQYD		\$	
0800	02071		JPC PAVEMENT-11 IN	606.00	SQYD		\$	
0090	02073		JPC PAVEMENT-9 IN	2,469.00	SQYD		\$	
0100	02101		CEM CONC ENT PAVEMENT-8 IN	70.00	SQYD		\$	
0110	02200		ROADWAY EXCAVATION	209.00	CUYD		\$	
0120	02562		TEMPORARY SIGNS	440.00	SQFT		\$	
0130	02599		FABRIC-GEOTEXTILE TYPE IV	606.00	SQYD		\$	
0140	02650		MAINTAIN & CONTROL TRAFFIC (US 40)	1.00	LS		\$	
0150	02650		MAINTAIN & CONTROL TRAFFIC (US 460)	1.00	LS		\$	
0160	02653		LANE CLOSURE	6.00	EACH		\$	
0170	02720		SIDEWALK-4 IN CONCRETE	318.00	SQYD		\$	
0180	02721		REMOVE CONCRETE SIDEWALK	106.00	SQYD		\$	
0190	02726		STAKING (US 40)	1.00	LS		\$	
0200	02775		ARROW PANEL	2.00	EACH		\$	
0210	04793		CONDUIT-1 1/4 IN	50.00	LF		\$	
0220	04811		ELECTRICAL JUNCTION BOX TYPE B	1.00	EACH		\$	
0230	04894		PREFORMED LOOP/LEAD-IN	50.00	LF		\$	
0240	04934		TEMP SIGNAL MULTI PHASE	1.00	EACH		\$	
0250	05985		SEEDING AND PROTECTION	200.00	SQYD		\$	
0260	06514		PAVE STRIPING-PERM PAINT-4 IN	2,050.00	LF		\$	
0270	06549		PAVE STRIPING-TEMP REM TAPE-B	1,000.00	LF		\$	
0280	06550		PAVE STRIPING-TEMP REM TAPE-W	3,500.00	LF		\$	
0290	06567		PAVE MARKING-THERMO STOP BAR-12IN	16.00	LF		\$	
0300	06568		PAVE MARKING-THERMO STOP BAR-24IN	13.00	LF		\$	
0310	06574		PAVE MARKING-THERMO CURV ARROW	3.00	EACH		\$	
0320	10020NS		FUEL ADJUSTMENT		DOLL		\$	\$838.00
0330	20453ES835		PREFORMED QUADRAPOLE LOOPS	102.00	LF		\$	
0340	23158ES505		DETECTABLE WARNINGS (NEW)	10.00	SQFT		\$	

Section: 0002 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0350	00462		CULVERT PIPE-18 IN	20.00	LF		\$	
0360	01000		PERFORATED PIPE-4 IN	530.00	LF		\$	
0370	01010		NON-PERFORATED PIPE-4 IN	60.00	LF		\$	
0380	01024		PERF PIPE HEADWALL TY 2-4 IN	2.00	EACH		\$	
0390	01459		CURB BOX INLET TYPE A MOD	1.00	EACH		\$	

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PROPOSAL BID ITEMS

162266

Report Date 9/9/16

	DID CODE	A 1 T	DECORIDATION	OLIANITITY	LINUT	LINIT DDIC	ED	AMOUNT
LINE	BID CODE	ALI	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	ГР	AWOUNT
0400	01490		DROP BOX INLET TYPE 1	1.00	EACH		\$	

Section: 0003 - DEMOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0410	02569	DEMOBILIZATION	1.00	LS		\$	